

CHAPTER 3. MECHANICAL DESCRIPTION

[1] Mechanical description

1. Facsimile block

1-1. Document feed block and diagram

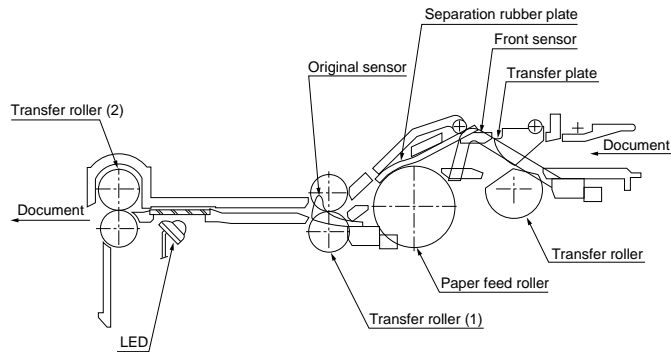


Fig. 1

2. Document feed operation

- 1) As shown in Fig.1, the document set in the hopper (the front sensor is on) is fed with the pay-out roller and paper feed roller which rotate together with the pulse motor.
- 2) When a specified number of pulses are received from the document sensor after the document lead edge is sensed, scanning will be started.
- 3) When a specified number of pulses are received from the document sensor after the document rear edge is sensed, scanning will be ended to discharge the document to the tray.
- 4) If the front sensor is on (the document is set up in the hopper), the next document is supplied and fed nearly when the last document is completely read and discharged. If the front sensor is off (no document is set up in the hopper), the drive will be stopped when the document is discharged to the tray.

3. Hopper mechanism

3-1. General view

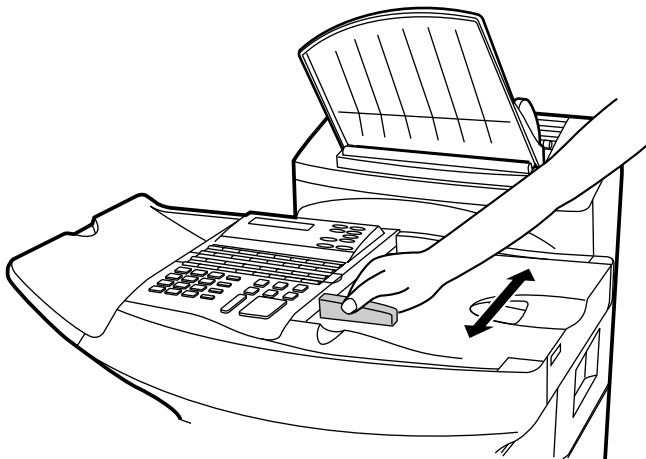


Fig. 2

The hopper is used to align documents with the document guides adjusted to the paper width.

NOTE: Adjust the document guides before and after inserting the document.

3-2. Automatic document feed

- 1) The structure with secure paper feed of the transfer roller and secure separation of the separation rubber plate system is employed. The transfer roller is so semicircular as to be rotated only when the paper feed roller is driven with the 2-step paper feed clutch mechanism. Moreover, the separation is done by running the paper feed and transfer rollers more slowly than the feed roller.
- 2) Document separation system:
Friction + speed reduction ratio + roller backlash separation system

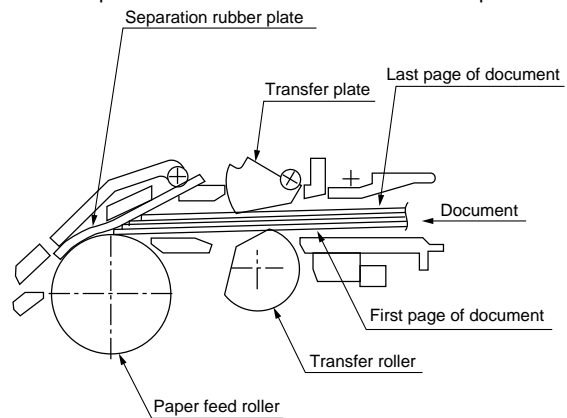


Fig. 3

3-3. Documents applicable for automatic feed

	Indication	Product specifications		
		Lower Limit	Upper Limit	
Weight indication	Japanese indication Size 4 × 6	45kg paper	70kg paper	
	Metric system indication	52g/m ²	80g/m ²	
	American indication LB system indication	14 LB	20 LB	
Thickness indication	Metric system indication	0.06mm	0.1mm	
	Inch system indication	0.0024"	0.0035"	
Document size	Document size Range	(148mm × 128mm) ~ W letter (279.4mm × 432mm) A4 (210mm × 297mm) Letter (216mm × 279mm)		
		Number of ADF sheets	Document size	B6 ~ Letter/A4 size 50 sheets
		Weight	B4 size/Legal 20 sheets W letter size 1 sheet 90 kg (104g/m ²) or more 135 kg (157g/m ²) or less 1 sheet	
Paper quality	Kind	Paper of fine quality/bond paper/ Kent paper		

NOTE: Double-side coated documents and documents on facsimile recording paper should be inserted manually.

Documents corresponding to a paper weight heavier than 90kg (104g/m²) and lighter than 135kg (157g/m²) are acceptable for manual feed.

Documents heavier than 135kg in terms of the paper weight must be duplicated on a copier to make it operative in the facsimile.

3-4. Loading the documents

- 1) Make sure that the documents are of suitable size and thickness, and free from creases, folds, curls, wet glue, Wet ink, clips, staples and pins.
- 2) Place documents face down in the hopper.
 - i) Adjust the document guides to the document width.
 - ii) Align the top edge of documents and gently place them into the hopper. The first page under the stack will be taken up by the feed roller to get ready for transmission.

NOTES: 1) Curled edge of documents, if any, must be straighten out.

- 2) Do not load the documents of different sizes and/or thicknesses together.

3-5. Documents requiring use of document carrier

- 1) Documents smaller than B6 (128mm x 182mm).
- 2) Documents thinner than the thickness of 0.06mm.
- 3) Documents containing creases, folds, or curls, especially those whose surface is curled (maximum allowable curl is 5mm).
- 4) Documents containing tears.
- 5) Carbon-backed documents. (Insert a white sheet of paper between the carbon back and the document carrier to avoid transfer of carbon to the carrier.)
- 6) Documents containing an easily separable writing material (e.g., those written with a lead pencil).
- 7) Transparent documents.
- 8) Folded or glued documents.

Document in document carrier should be inserted manually into the feeder.

4. Optical system

(1) General view

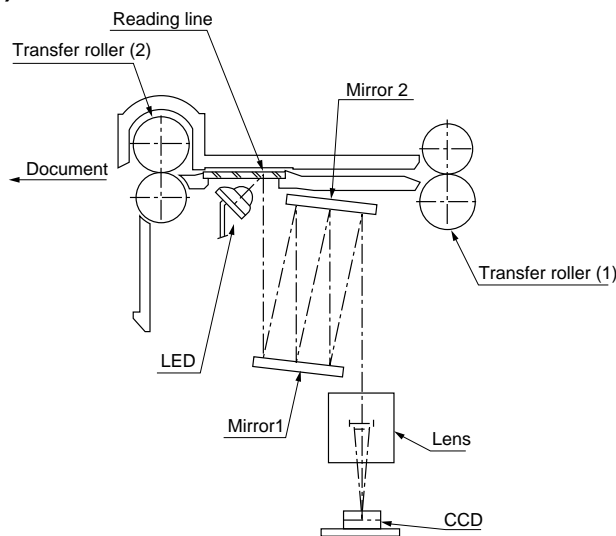


Fig. 4

(2) Composition

The optical system is composed of the document feed mechanism, the lamp, the reflecting mirrors, the focusing lens, the CCD sensor, and the read process circuit.

4-1. LED Lamp

The LED lamp is used to expose the document.

4-2. Lens

The lens is used to focus the light reflected from the document on the CCD elements.

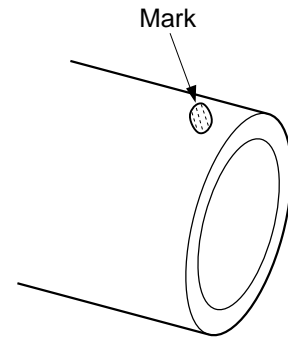


Fig. 5

4-3. CCD

The CCD (charge coupled device) image sensor consists of a photodiode array which converts the intensity of light reflected from the document surface into series of analog voltages which are then stored in an analog shift register. The series of analog voltages are then converted into a digital equivalent by a black/white binary logic circuit.

(Example) Scan signal output waveform

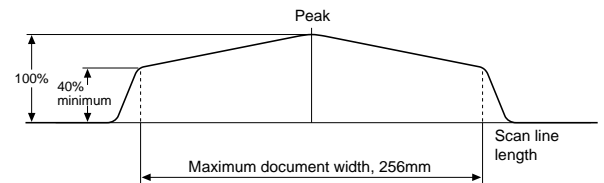


Fig. 6

- 1) The minimum output from the CCD at the maximum scan width of document (256mm) must be more than 40% of the peak value.
- 2) The peak output must be about 200mV under room temperature to avoid CCD saturation.

[2] Printer description

1. COMPONENTS LAYOUT

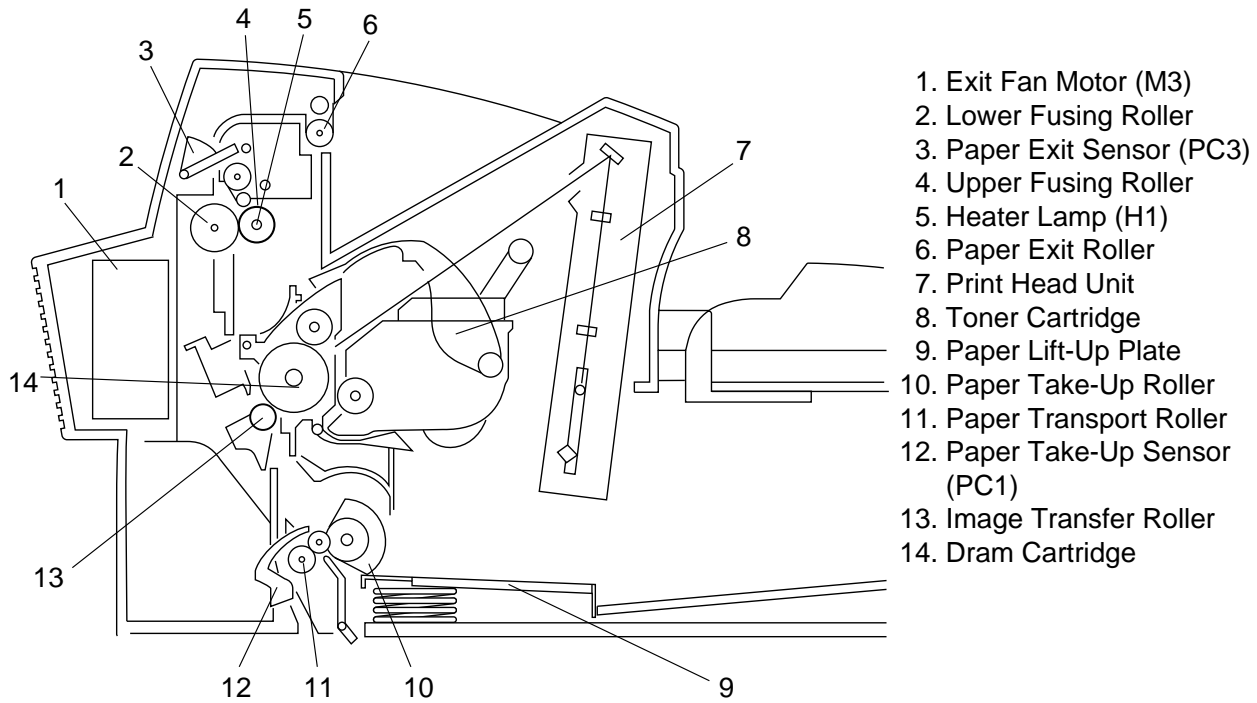


Fig. 1

2. DRIVE SECTION

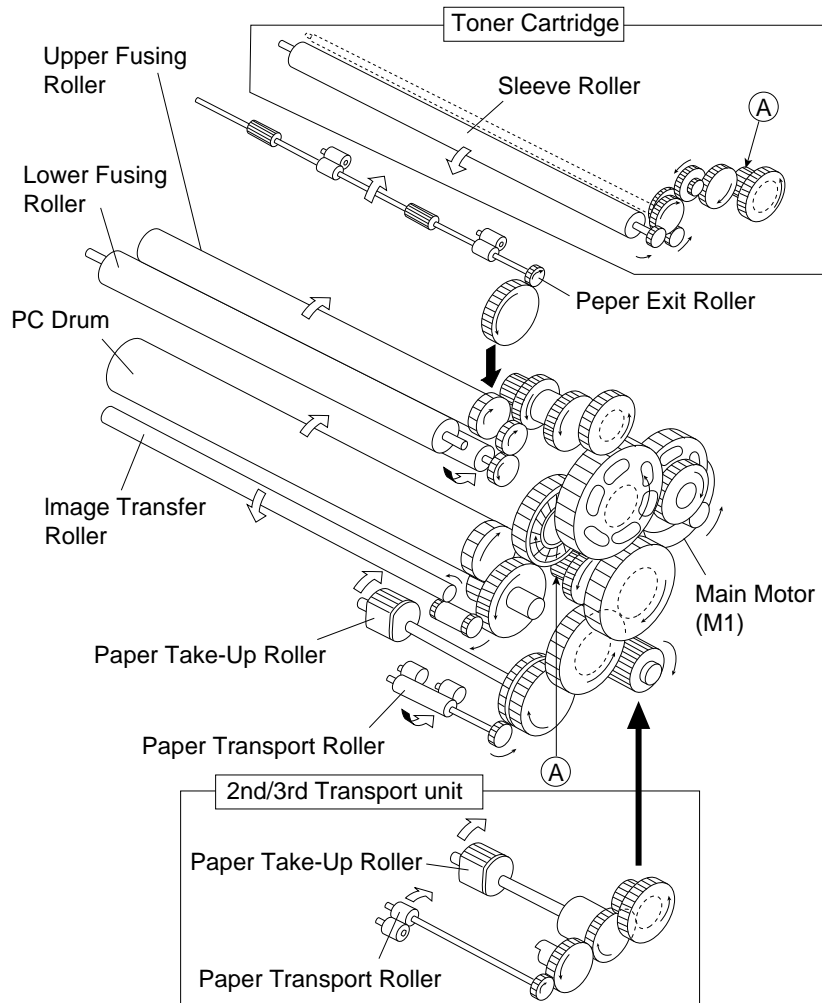


Fig. 2

3. PRINTER ENGINE ELECTRICAL COMPONENTS LAYOUT

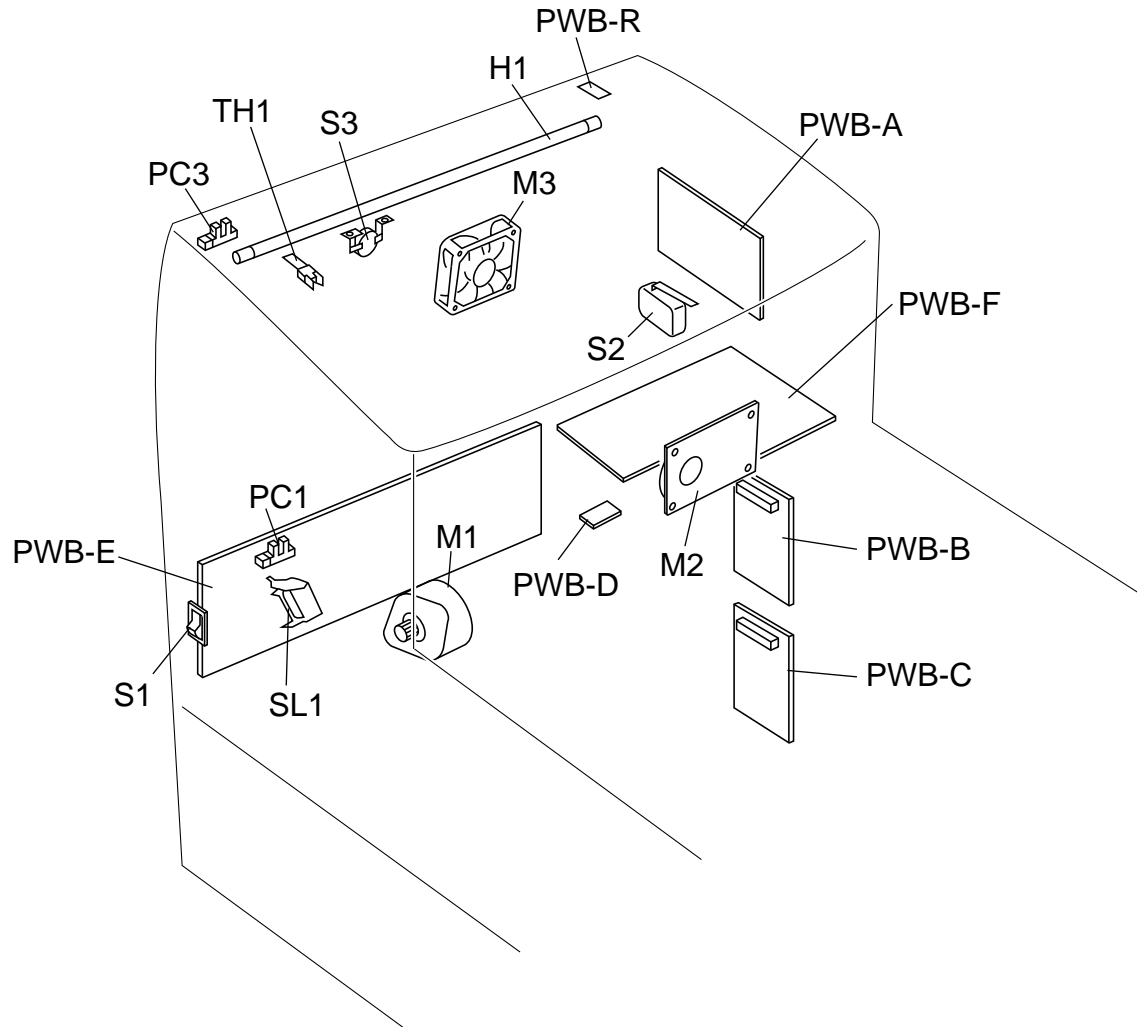


Fig. 3

4. ELECTRICAL PARTS IDENTIFICATION

Symbol	Name	Function
PWB-A	Printer Control PWB	Communicates with the controller and controls all printer operation.
PWB-D	Laser Diode Drive	Detects the start position of the image by the Laser Diode and the SOS Sensor.
PWB-E	Power Supply PWB	Converts the power voltage from AC voltage into DC voltage and supplies that to H1.
PWB-F	High Voltage PWB Unit	Applies each voltage respectively to the Rotating Charge Brush, the Sleeve Roller, the Toner Regulation Plate, the Toner Collecting Plate and the Electrode Plate.
PWB-R	Resistor PWB	Prevents the image transfer current from flowing to paper by the resistor.
M1	Main Motor	Is the drive source of the printer.
M2	Polygon Motor	Rotates at high speed and makes the laser scan in scanning direction.
M3	Fan Motor	Exhausts the heated air out of the printer.
SL1	Paper Take-Up Solenoid	Transmits the drive of the Main Motor to the Paper Take-Up Roller.
H1	Heater Lamp	A halogen lamp that supplies heat to the Upper and Lower Fusing Rollers.
TH1	Thermistor	Detects the temperature of the Upper Fusing Roller.
S1	Power ON/OFF Switch	Turns ON or OFF the printer.
S2	Interlock Switch	Detects the opening or closing of the Upper Unit.
S3	Thermostat	Cuts off the current to H1 when blown.
PC1	Paper Take-Up Sensor	Detects when paper is picked up and the paper size. The signal is L when the paper is detected.
PC3	Paper Exit Sensor	Detects when the paper is fed out. The signal is L when the paper is detected.
PWB-B	2nd Transport PWB	Connects the printer and the Second Tray.
PWB-C	3rd Transport PWB	Connects the printer and the Third Tray.

5. ELECTRICAL SERVICE PARTS ON P.W.BOARDS

P.W.Board	Symbol	Function
PWB-F	VR1, 2	Factory settings
PWB-E	F701	Power Unit protection fuse 120V AC125V 5A
PWB-A	VR1	Positioning adjustment of the start of image (Refer to Adjustment section.)

PWB-F

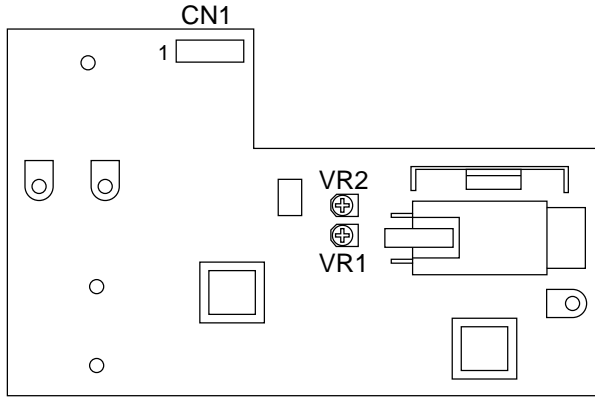


Fig. 4

PWB-E

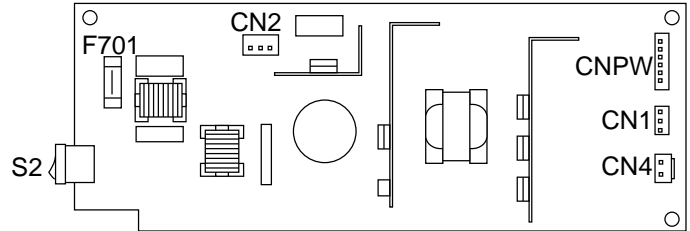


Fig. 5

PWB-A

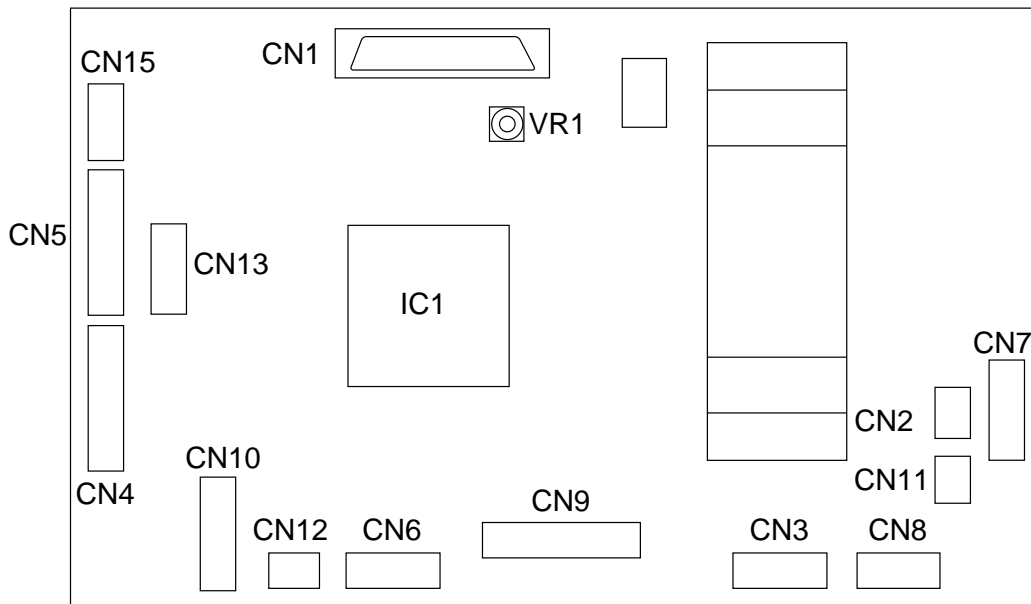


Fig. 6

6. PRINT PROCESSING

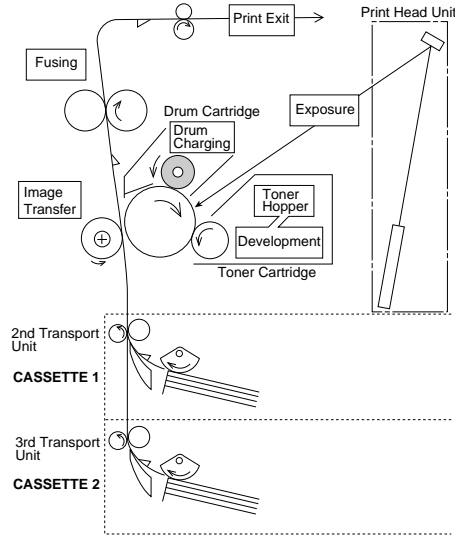


Fig. 7

7. PAPER TAKE-UP SECTION

Paper can be fed into the printer from the Multi Purpose Tray or from the Manual Feed Port (1 sheet).

Installing the Second Tray adds another feeding method.

The paper fed by the Paper Take-Up Roller is transported to the Transport Roller, Fusing Roller and then Paper Exit Roller. After this, the paper is fed out onto the Print Tray.

The starting position of an image is decided by the Paper Take-Up Sensor (PC1).

7-1. Multi-Purpose Tray

When the Paper Take-Up Solenoid is energized, the drive of the Main Motor (M1) is transmitted to the Paper Take-Up Roller via the Paper Take-Up Clutch (one-way clutch) to rotate the Paper Take-Up Roller one revolution. At the same time, the Depressing Cam rotates and releases the Paper Lift-Up Plate to feed the top (first) sheet of paper.

The Fixed Separating Pad is used for the paper separation system. It prevents the second or later sheets of paper from being fed together with the top paper.

A Paper Empty Sensor in the Multipurpose Tray senses when the paper tray is empty. Additionally, a sensor informs the Printer Control PWB if the paper guide is adjusted to Legal and that legal sized paper is installed.

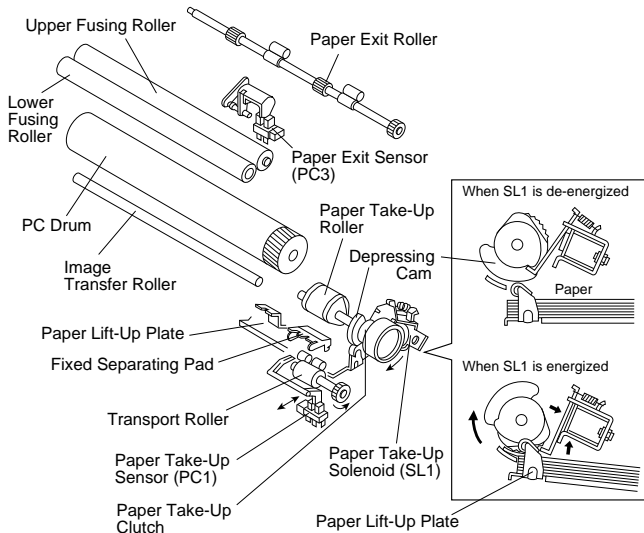


Fig. 8

8. DRUM CHARGE

The PC Drum is charged with static electricity before laser exposure. The Rotating Charge Brush and the Precharge-film are used for the charging method.

The rotating brush charging and the Precharge-film charging generate little ozone in the printer. Because the charge is directly given to the PC Drum, the PC Drum can be charged by low voltage. At the same time, PC Drum can be charged stably and evenly.

The Precharge-film charging supplies the charge to the Rotating Charge Brush to improve the charging efficiency.

The Rotating Charge Brush is turned by the drive of the Main Motor (M1) via a gear.

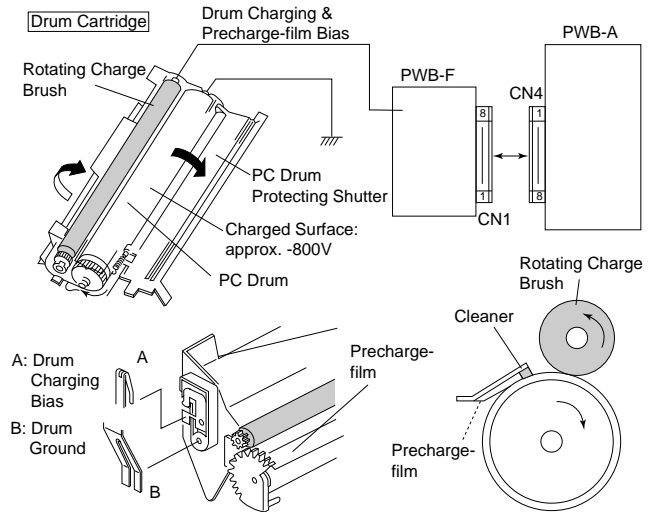


Fig. 9

9. LASER EXPOSURE

An invisible static image is made by the laser beam emitted from the Print Head Unit.

In the sub-scanning direction (vertical direction)

When the printer receives the PRINT signal, the Polygon Motor and the Main Motor rotate and the paper is fed into the printer.

The printing in the sub-scanning direction is started when the PWB-P sends the VIDEO signal to the Print Head a certain time after the leading edge of the paper activates the Paper Sensor (TOD signal). The print starting position of the 2nd line is decided by delaying the VIDEO signal sending timing.

In the scanning direction (horizontal direction)

The SOS Sensor is installed on the Laser Diode Control Board (PWB-D) to unify the laser emission timing for each scan line.

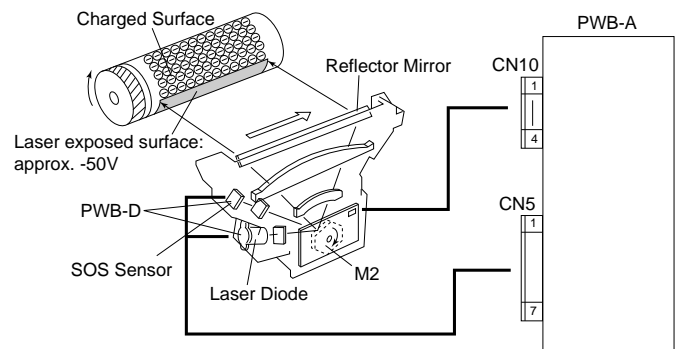


Fig. 10

10. DEVELOPMENT

Toner is applied to the invisible static image on the PC Drum and a toner image is created on the surface.

The development is the process of creating a toner image on the PC Drum by applying toner onto the invisible static electricity image.

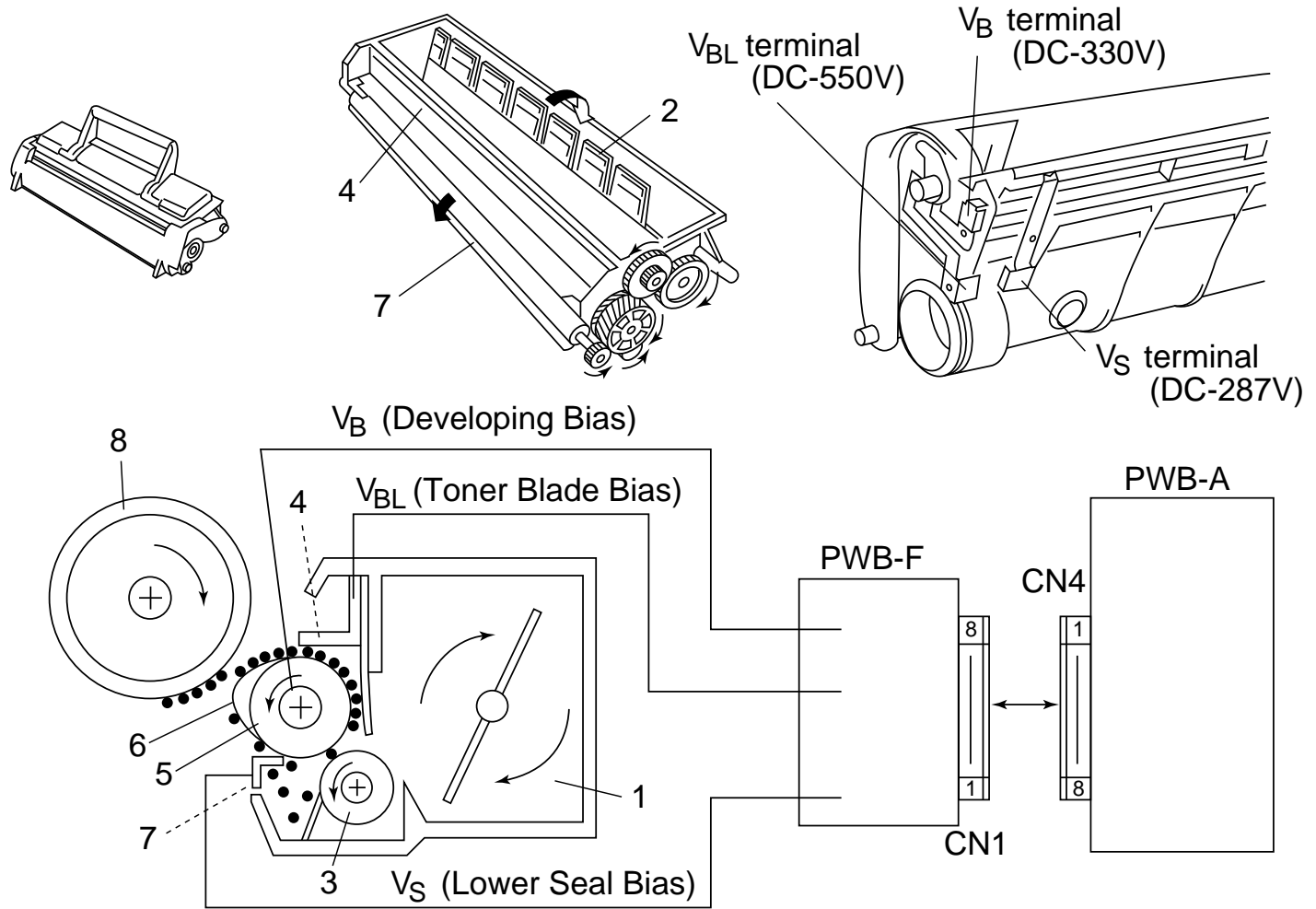


Fig. 11

Part Name	Function
1. Toner Hopper	Contains toner.
2. Toner Agitating Screw	Agitates the toner in the Toner Hopper and sends the toner to the Toner Transport Roller.
3. Toner Transport Roller	Transports the toner to the Sleeve Roller.
4. Doctor Blade	Spreads a thin, even coat of toner over the Resin Sleeve. The toner is negatively charged when passing between this Blade and the Resin Sleeve.
5. Sleeve Roller	Rotates the Resin Sleeve.
6. Resin Sleeve	Carries the toner to the PC Drum surface for development.
7. Bias Seal	Carries the toner remaining on the Resin Sleeve and neutralizes charge.
8. PC Drum	Exposed to laser to create an invisible image and rotates to carry the developed image to the paper surface.

11. IMAGE TRANSFER

Image transfer is the process of transferring the toner image created on the PC Drum in the developing process to paper. We use the Roller Image Transfer instead of the Corona Image Transfer, as the image transfer method. In the Roller Image Transfer, there is little generation of ozone due to corona discharge. Also, there is no blur of toner because the paper is always pressed by the PC Drum and the Image Transfer Roller.

When cleaning the Image Transfer Roller and before printing, reverse bias is applied.

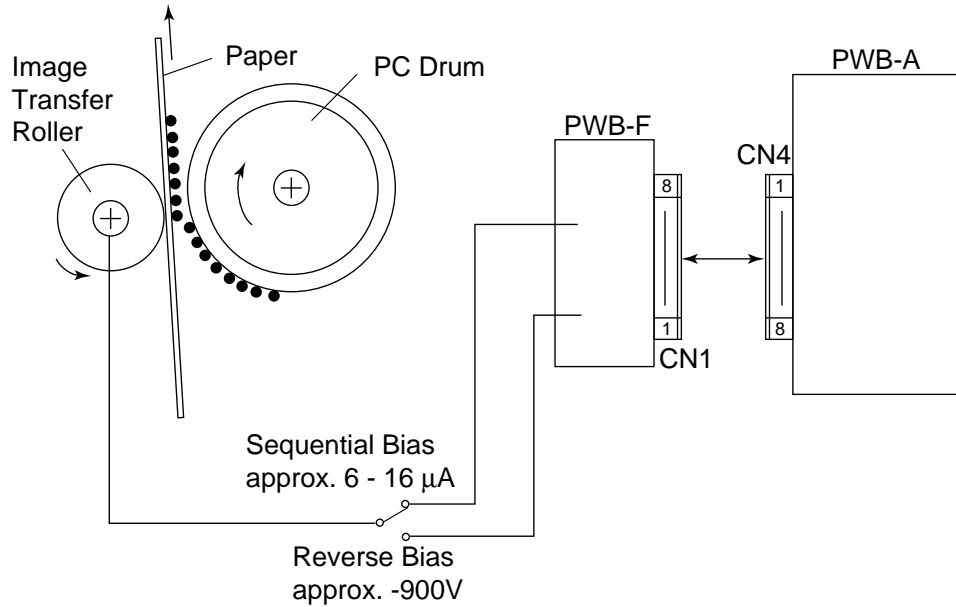


Fig. 12

12. FUSING

12-1. An Overview

The toner image transferred onto the paper is securely fixed. A heat roller system is used as the fusing system. The toner image is fused by the Upper Fusing Roller heated by the Heater Lamp, and securely fixed by the pressure between the Upper and Lower Fusing Rollers. A Thermistor (TH1) detects and controls the Upper Fusing Roller temperature. The Thermostat (S3) blows when the temperature becomes approx. 133°C and shuts down the power to the Heater Lamp.

12-2. Fusing Temperature Control Circuit

The Thermistor (TH1) detects the surface temperature of the Upper Fusing Roller and inputs that analog voltage into IC1A-77. Corresponding to this data, the Heater Lamp ON/OFF signal is output from IC1A-54, causing the Heater Lamp (H1) to turn ON or OFF to control the fusing temperature. When the Heater Lamp is not turned OFF even if the Thermistor detects a high temperature malfunction (if the surface temperature of the Upper Fusing Roller exceeds 200°C), the signal from IC1A-75 changes from H to L to turn OFF the Heater Lamp forcibly.

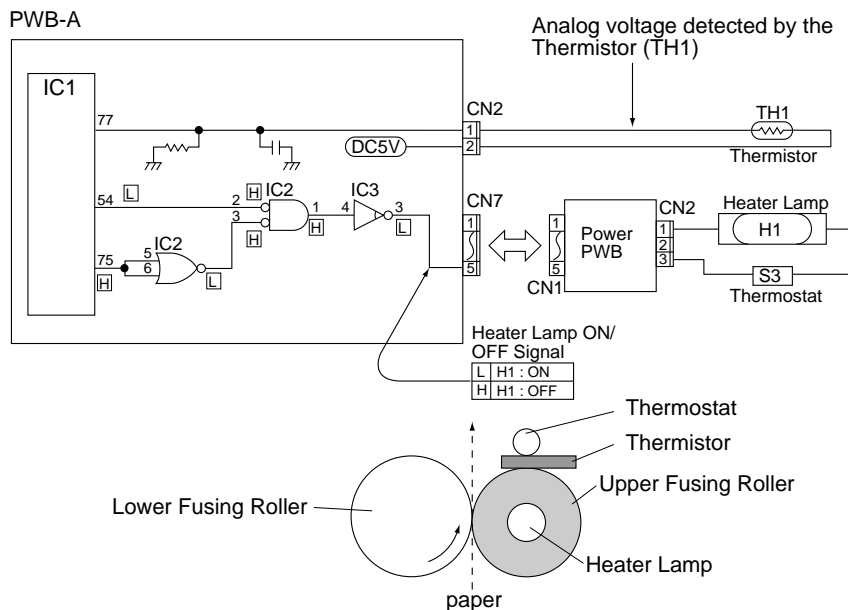


Fig. 13

- 1) Warming Up After the initialization of the printer, warming up of the printer starts and the Heater Lamp turns ON until the temperature of the Upper Fusing Roller reaches approx. 172°C.
- 2) Standby In this standby mode, the temperature of the Upper Fusing Roller is maintained at 156°C. When this condition continues for 3minutes, the printer turns to Standby mode at low temperature.
- 3) Print Cycle When the printer obtains the printing command from its controller, the Upper Fusing Roller is maintained at 172°C.
- 4) Standby at low temperature The Upper Fusing Roller is maintained at 112°C.

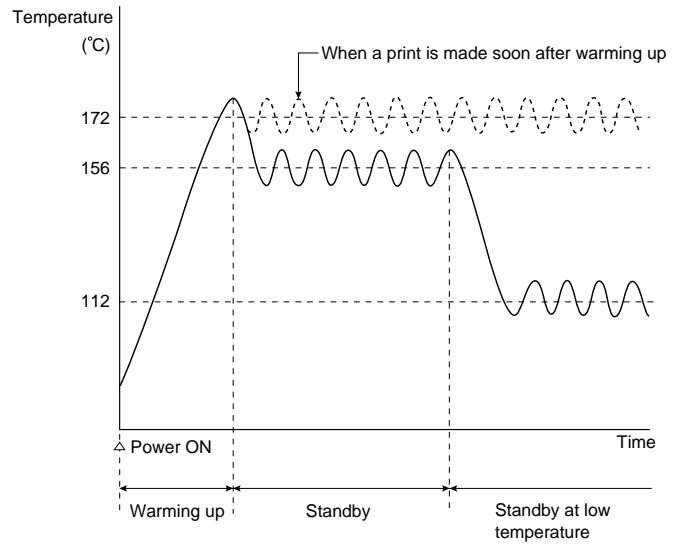


Fig. 14

13. PRINT SEQUENCE

13-1. Print Starting

13-2. Print Ending

Unit: msec

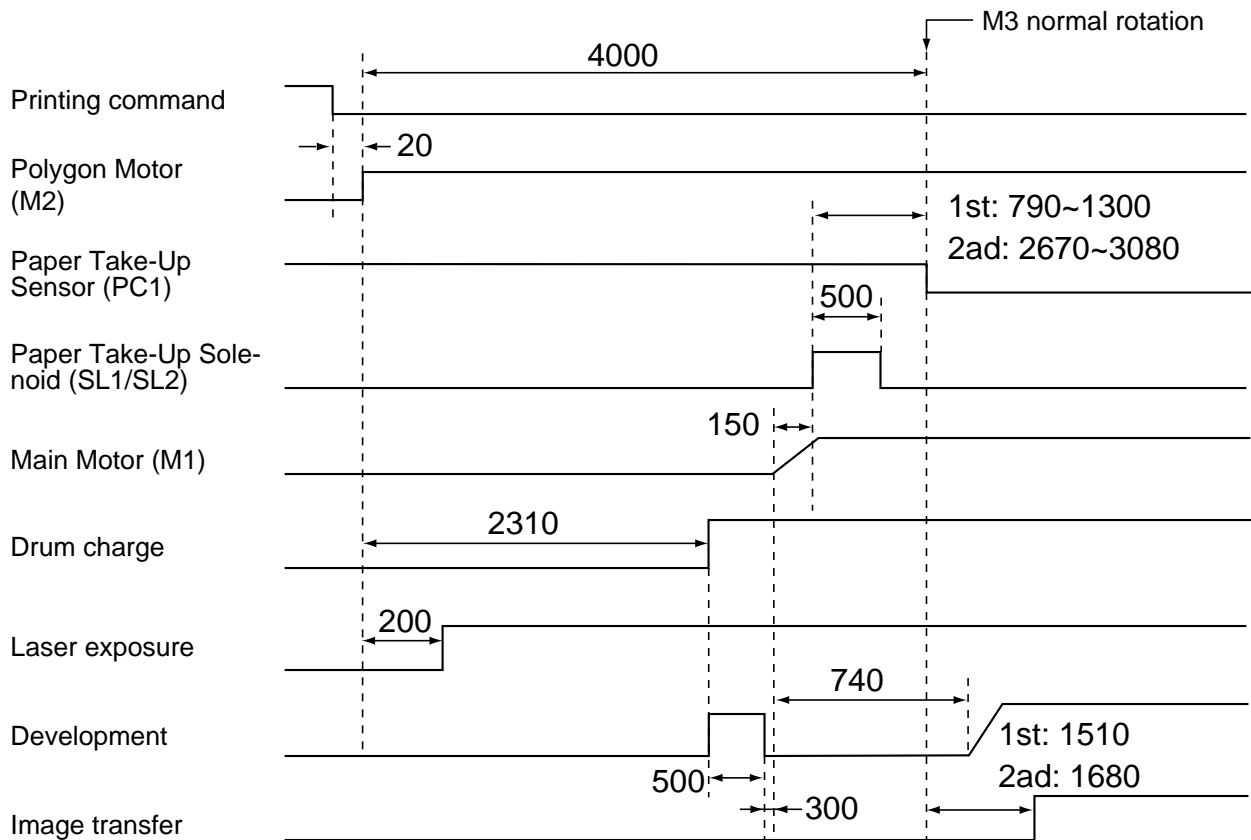


Fig. 15

[3] Disassembly and assembly procedures

- This chapter mainly describes the disassembly procedures. For the assembly procedures, reverse the disassembly procedures.
- Easy and simple disassembly/assembly procedures of some parts and units are omitted. For disassembly and assembly of such parts and units, refer to the Parts List.
- The numbers in the illustration, the parts list and the flowchart in a same section are common to each other.
- To assure reliability of the product, the disassembly and the assembly procedures should be performed carefully and deliberately.
- The part where the mounting screws are painted in red. (See page 3-31.)

1 Left side panel, speaker and handset cover

Parts list (Fig. 1)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Mechanism unit	1	10	Screw (3×10)	3
2	Screw (3×10)	3	11	Handset cover unit	1
3	Connector	2	12	Left side panel, top	1
4	Left side panel, top unit	1	13	Screw (3×8)	1
5	Screw (3×10)	2	14	Handset cover, bottom	1
6	Left side panel, bottom	1	15	Screw (3×8)	1
7	Screw (3×10)	3	16	Hook switch PWB	1
8	Washer (φ3)	3	17	Hook switch lever	1
9	Speaker	1	18	Handset cover, top	1

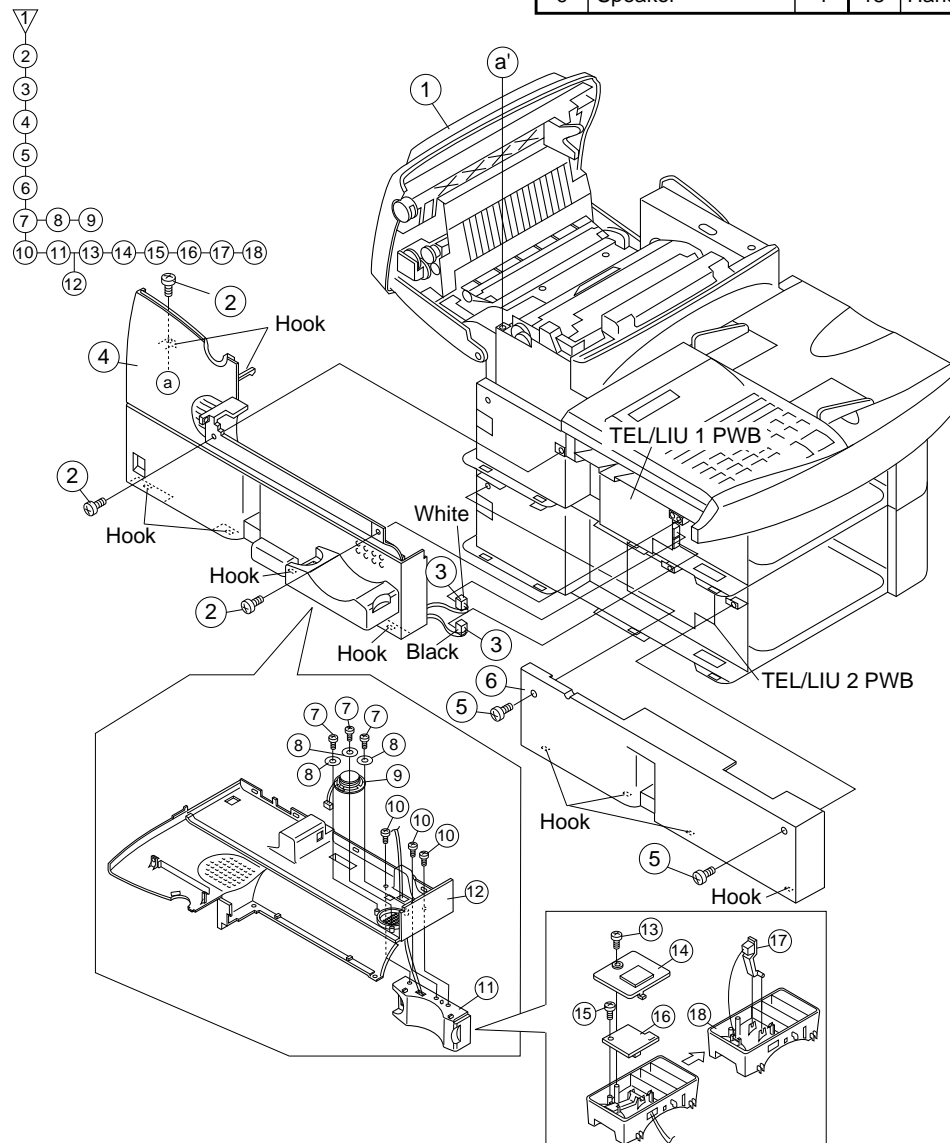


Fig. 1

2 Right side panel

Parts list (Fig. 2)

No.	Part name	Q'ty
1	Mechanism unit	1
2	Screw (3×10)	1
3	Screw (3×10)	2
4	Right side panel, top	1
5	Screw (3×10)	2
6	Right side panel, bottom	1

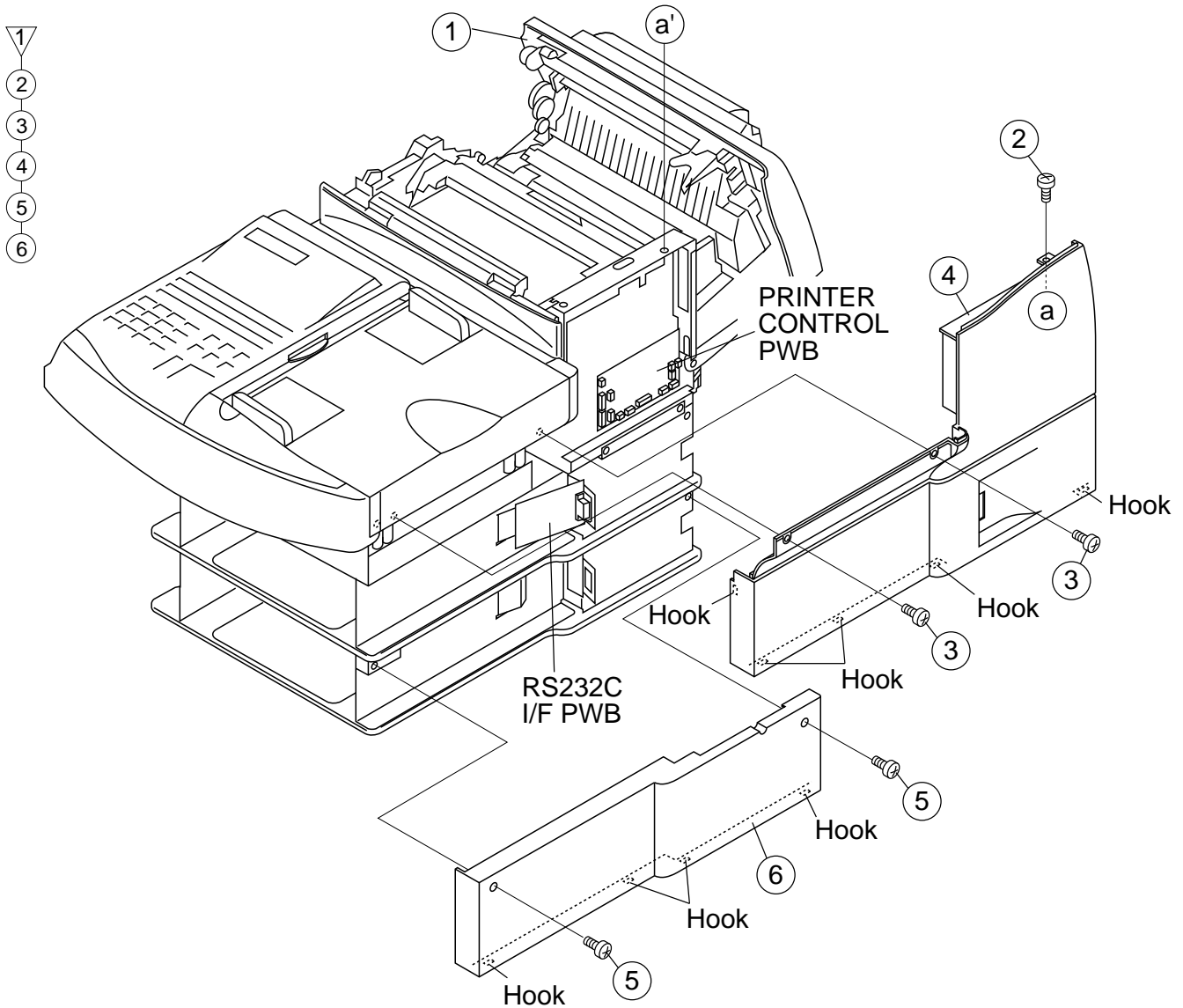


Fig. 2

3

Hopper, scanner cover, inner tray and printer front cover

Parts list (Fig. 3)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Mechanism unit	1	12	Screw (3×6)	1
2	Hopper unit	1	13	Pinion gear	1
3	Screw (3×10)	2	14	Hopper spring	1
4	Scanner cover	1	15	Hopper guide, left	1
5	Screw (3×10)	3	16	Hopper guide, right	1
6	Connector	1	17	Hopper	1
7	Inner tray unit	1	18	Paper setting plate	1
8	Screw (3×10)	2	19	Screw (3×8)	1
9	Printer front cover	1	20	ROM cover	1
10	Screw (3×8)	2	21	Inner tray	1
11	Hopper window	1			

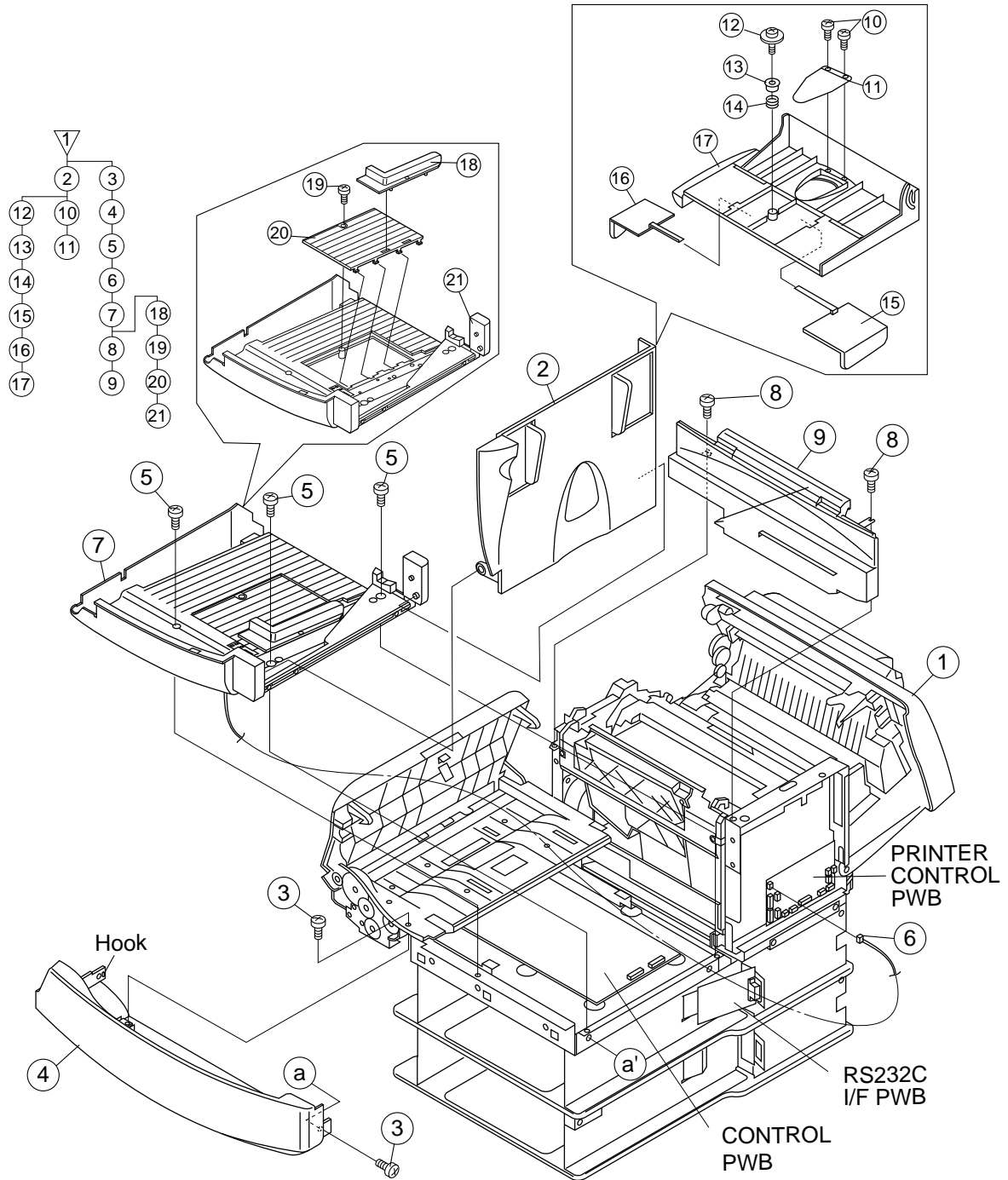


Fig. 3

5

Document guide lower, operation panel unit and optical unit.

Parts list (Fig. 5)

No.	Part name	Q'ty
1	Scanner unit	1
2	Screw (3×10)	5
3	Reader glass	1
4	Document guide lower	1
5	Screw (3×10)	1
6	Operation panel unit	1
7	Optical unit	1

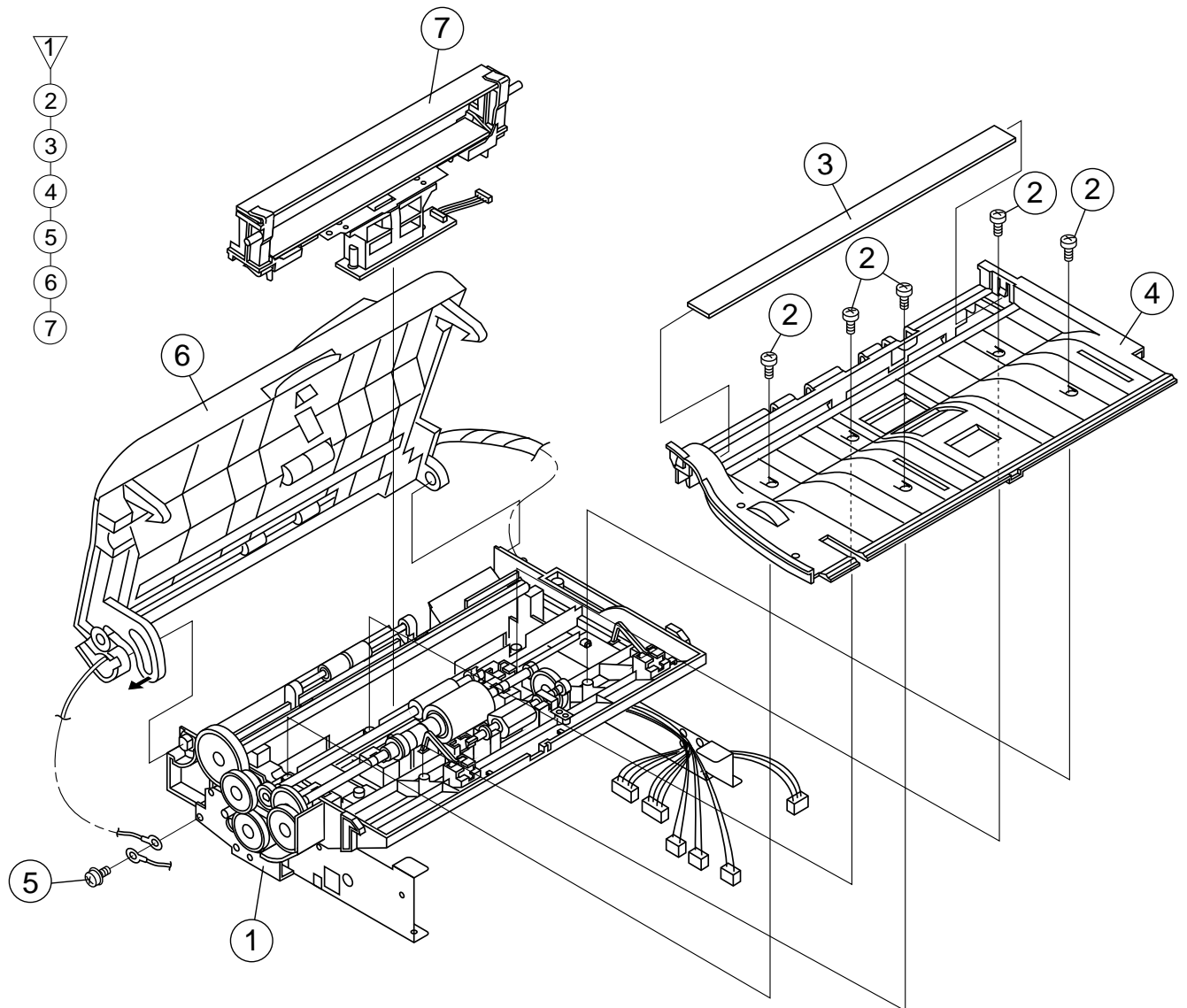


Fig. 5

6

Operation panel and document guide upper

Parts list (Fig. 6)

No.	Part name	Q'ty	No.	Part name	Q'ty	No.	Part name	Q'ty
1	Screw (3×10)	3	13	Separator plate	1	25	LCD	1
2	Document guide upper unit	1	14	Separator rubber	1	26	Page plate	1
3	Release lever	1	15	Separator sheet	1	27	Panel cable	1
4	Release lever spring	1	16	Paper feed pressure spring	1	28	Screw (2×6)	9
5	Screw (3×8)	3	17	Rear sheet	1	29	Operation panel PWB unit	1
6	Electro-static discharger brush earth cable	1	18	Electro-static discharger brush	1	30	Change key	1
7	Earth plate spring 4	1	19	Bearing	2	31	Stop key	1
8	Reinforcement bracket	1	20	Transfer roller gear	1	32	Mode key	1
9	Separator spring	1	21	Transfer roller	1	33	Start key	1
10	Pinch roller spring	2	22	Document guide upper	1	34	Direct key	1
11	Pinch roller	2	23	Operation panel unit	1	35	12 key	1
12	Pinch roller shaft	1	24	Decoration panel	1	36	Operation panel	1

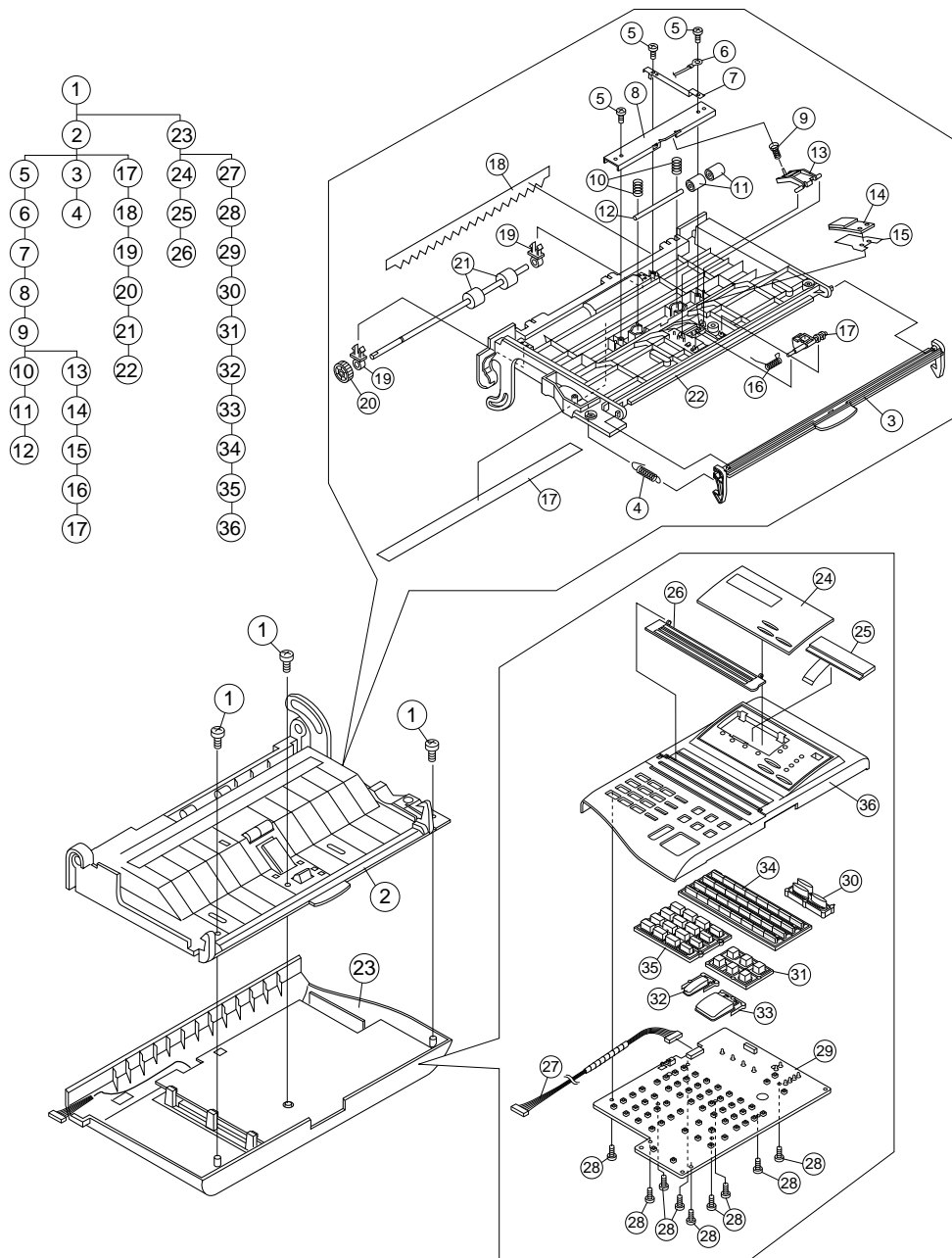


Fig. 6

7

Optical unit

Parts list (Fig. 7)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Shading sheet	1	9	Connector	1
2	Mirror	1	10	CCD PWB unit	1
3	Screw (3×8)	1	11	Screw (3×8)	2
4	Mirror hold plate, right	1	12	Screw (3×6)	1
5	Mirror	1	13	Lens holding spring	1
6	Screw (3×8)	1	14	Lens	1
7	Mirror hold plate, left	1	15	Lens holder	1
8	Screw (RED)	2	16	Lens holder plate	1

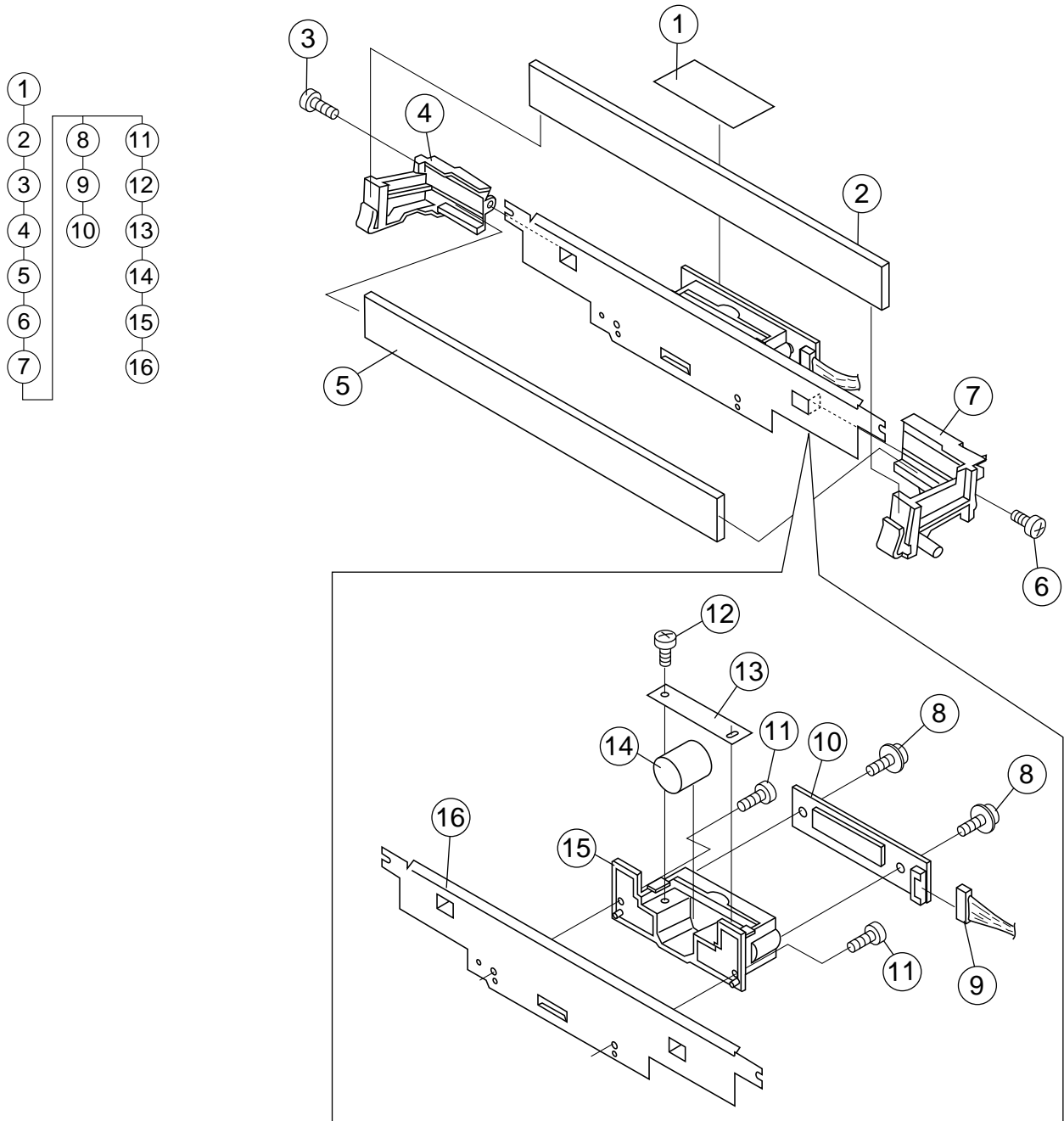


Fig. 7

8

Scanner frame unit and drive unit

Parts list (Fig. 8)

No.	Part name	Q'ty	No.	Part name	Q'ty	No.	Part name	Q'ty
1	LED	1	14	ADF transfer gear	1	27	Document sensor (White)	1
2	Screw (3×10)	2	15	Paper feed roller shaft 2	1	28	Front sensor (Black)	1
3	Pinch roller spring 2	1	16	E ring	1	29	Front sensor (Red)	1
4	Screw (3×10)	1	17	ADF paper feed gear	1	30	Screw (3×10)	2
5	Verification stamp ass'y	1	18	Washer	1	31	Drive unit	1
6	Earth plate spring 2	1	19	Washer	1	32	Screw (3×6)	1
7	Pinch roller	2	20	Paper feed roller	1	33	Earth plate spring 3	1
8	Pinch roller shaft	1	21	Paper feed clutch unit	1	34	Screw (3×10)	2
9	Screw (3×10)	1	22	Paper feed roller shaft 1	1	35	Scanner frame bracket, rear	1
10	Stopper spring	1	23	Paper feed gear	1	36	Bushing	1
11	Transfer idler gear	1	24	Transfer roller 1	1	37	Screw (3×10)	2
12	Bearing	5	25	Transfer gear 1	1	38	Scanner frame bracket, front	1
13	Transfer roller	1	26	Transfer sensor (Green)	1	39	Earth plate spring 1	1
						40	Dustproof sheet	2
						41	Scanner frame	1

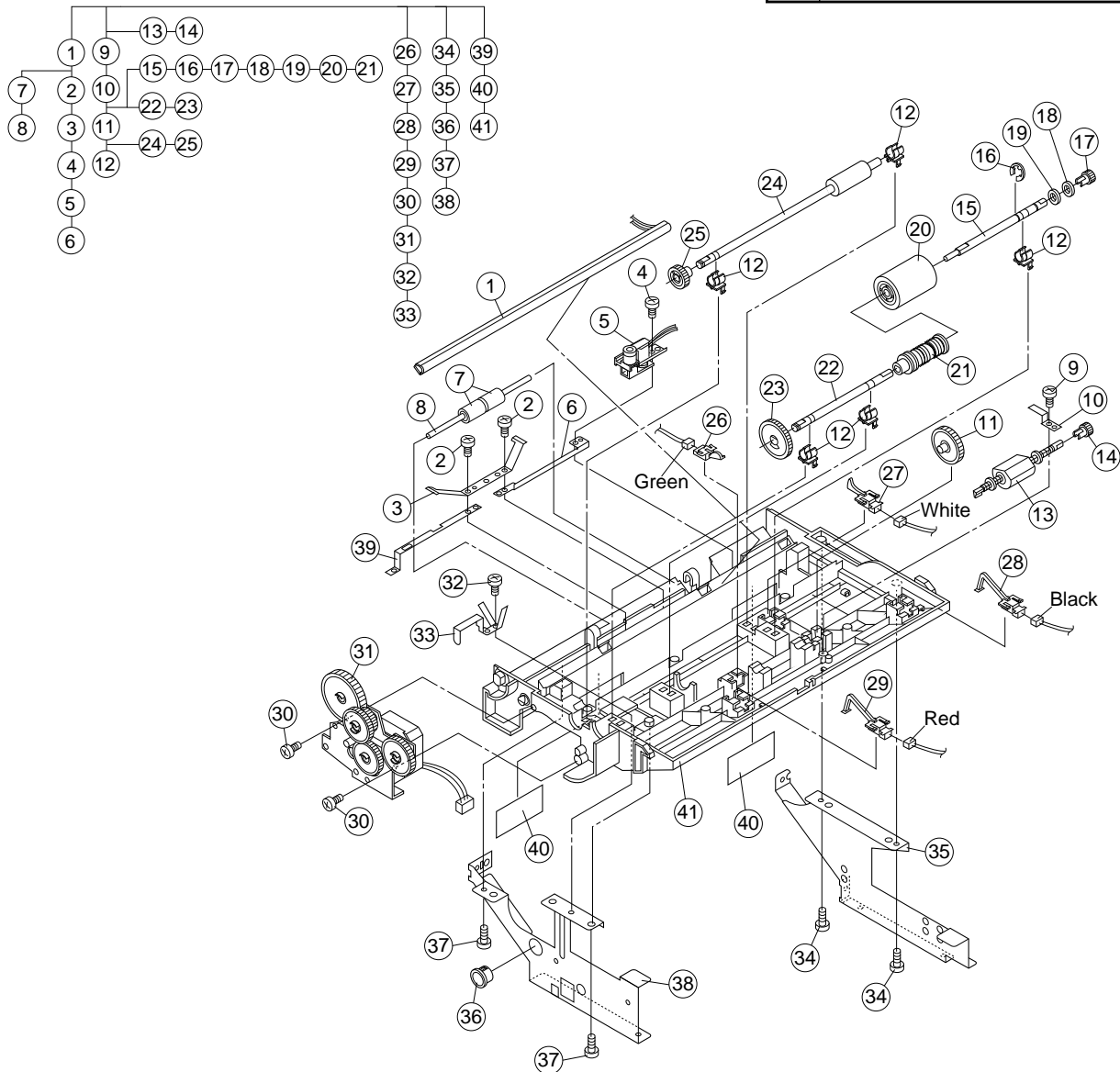


Fig. 8

9

Drive unit

Parts list (Fig. 9)

No.	Part name	Q'ty
1	Reduction gear (14/50Z)	1
2	Idler gear (45Z)	1
3	Slow down gear (27/46Z)	1
4	Idler gear (70Z)	1
5	Screw (3×6)	2
6	Transfer motor	1
7	Motor plate	1

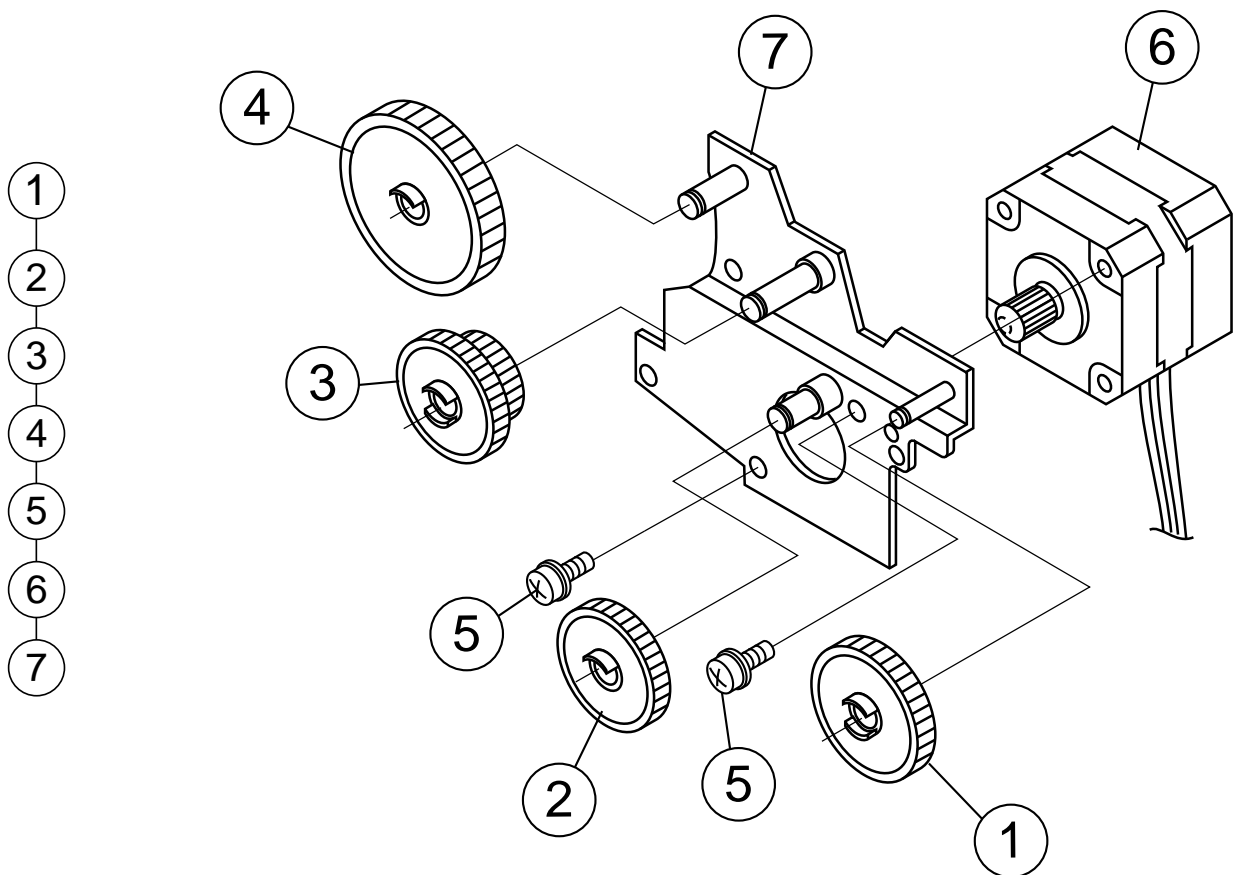


Fig. 9

10 PWB section

Parts list (Fig. 10)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Mechanism unit	1	10	TEL/LIU 1 PWB sheet	1
2	Connector	1	11	TEL/LIU 1 PWB unit	1
3	Screw (3×6)	2	12	Screw (3×6)	3
4	Screw (3×8)	1	13	TEL/LIU 2 PWB bracket	1
5	Clamp	1	14	TEL/LIU 2 PWB sheet	1
6	Core	1	15	TEL/LIU 2 PWB unit	1
7	Control/line control PWB unit	1	16	Connector	1
			17	Screw (3×6)	1
8	Screw (3×6)	3	18	Screw (Special)	2
9	TEL/LIU 1 PWB bracket	1	19	RS232C I/F PWB unit	1

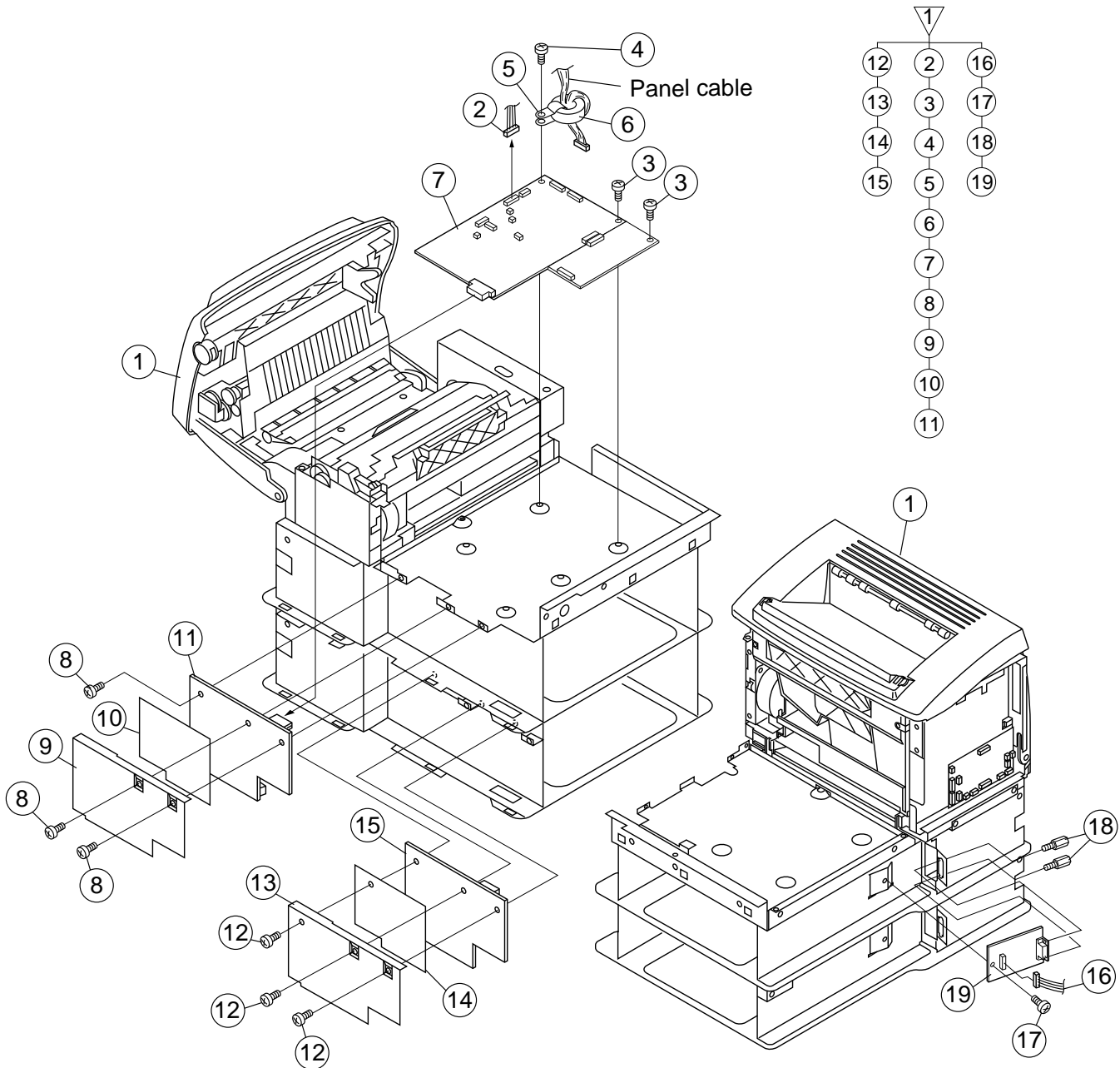


Fig. 10

11 Power supply PWB and printer unit

Parts list (Fig. 11)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Mechanism unit	1	8	Screw (4x8)	1
2	Screw (3x6)	2	9	AC cord	1
3	Screw (3x6)	1	10	Screw (3x8)	1
4	Screw (3x8)	1	11	Power supply PWB cover	1
5	Connector	4	12	Power supply PWB unit	1
6	Power supply PWB ass'y	1	13	Screw (3x6)	4
7	Screw (3x6)	5	14	Printer unit	1

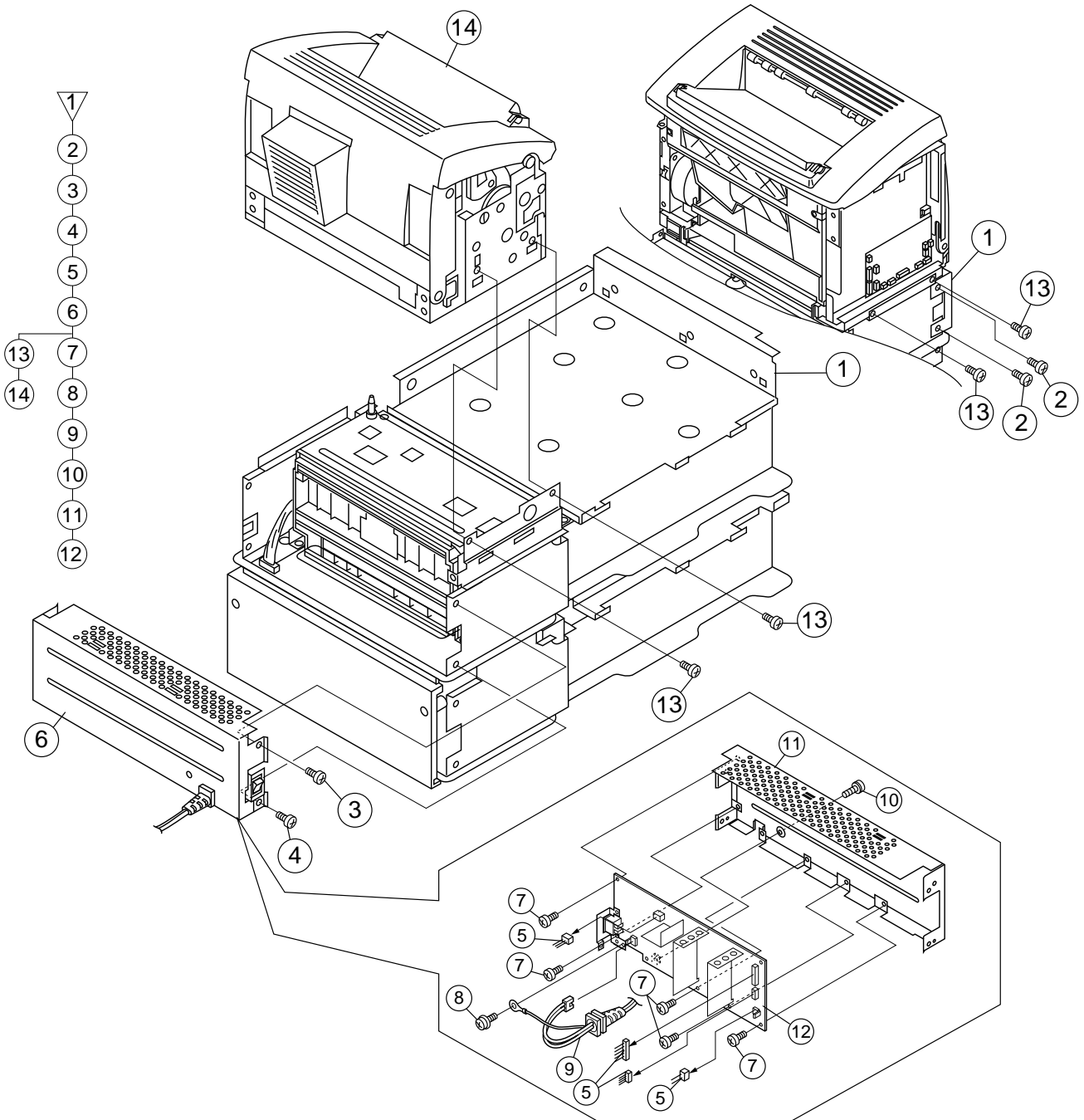


Fig. 11

12

**2nd transport unit,
upper chassis unit and rear panel**

Parts list (Fig. 12)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Chassis unit	1	7	Connector	1
2	Screw (3×6)	4	8	Screw (3×6)	2
3	Connector	1	9	Printer bracket	1
4	2nd transport unit	1	10	Mini clamp	1
5	Screw (3×6)	4	11	Upper chassis unit	1
6	Screw (3×6)	2	12	Screw (3×10)	2
			13	Rear panel	1

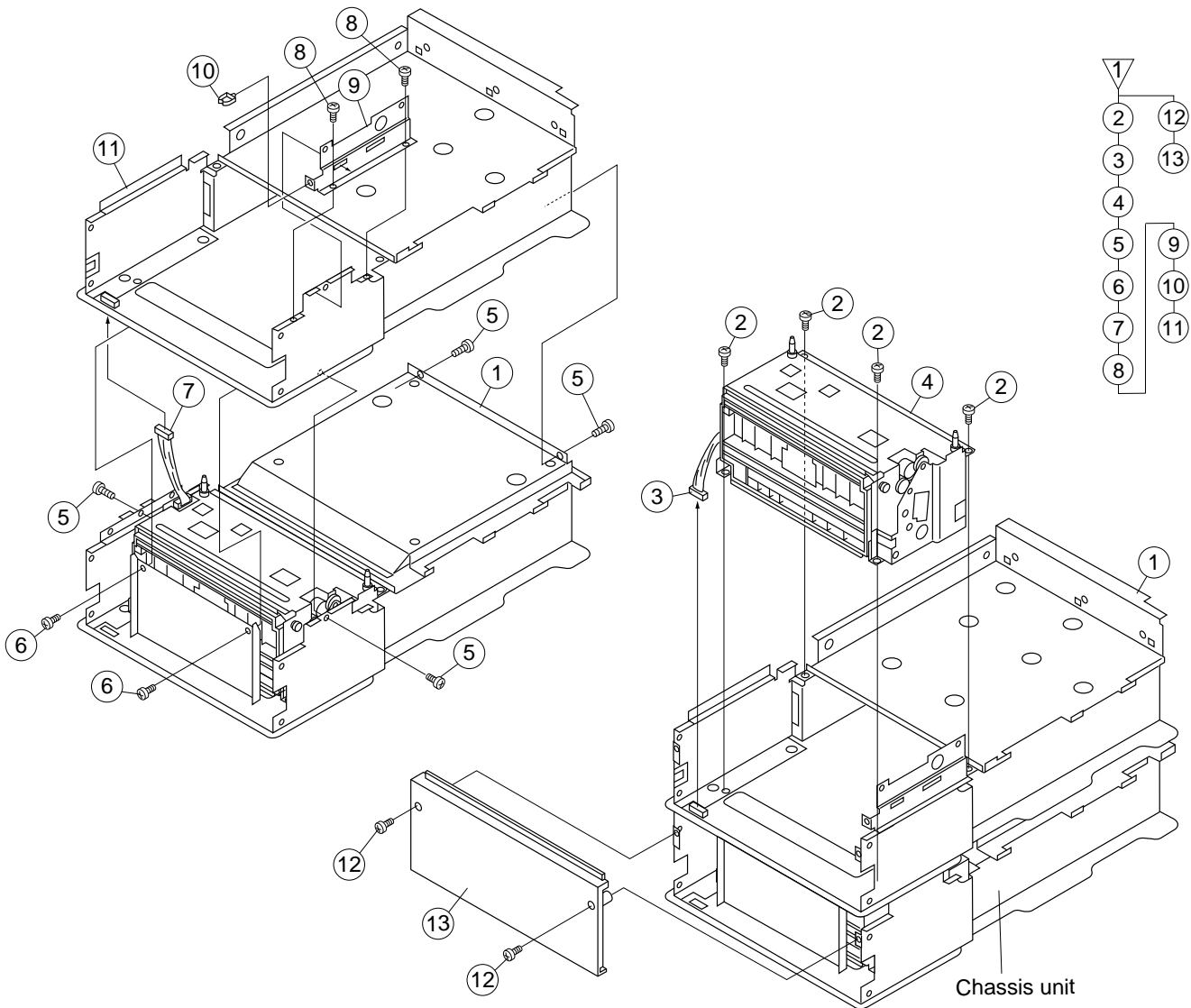


Fig. 12

13

Upper chassis unit

Parts list (Fig. 13)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Upper chassis unit	1	11	Screw (3×6)	2
2	Edge holder	1	12	Bottom plate bracket, top	1
3	Wire holder	1	13	Screw (3×6)	2
4	Screw (3×6)	4	14	Cassette lock plate, left	1
5	Top plate, top	1	15	Cassette lock plate, right	1
6	Edging	1	16	Bottom plate, upper	1
7	Screw (3×6)	3			
8	Right side chassis	1			
9	Screw (3×6)	3			
10	Left side chassis	1			

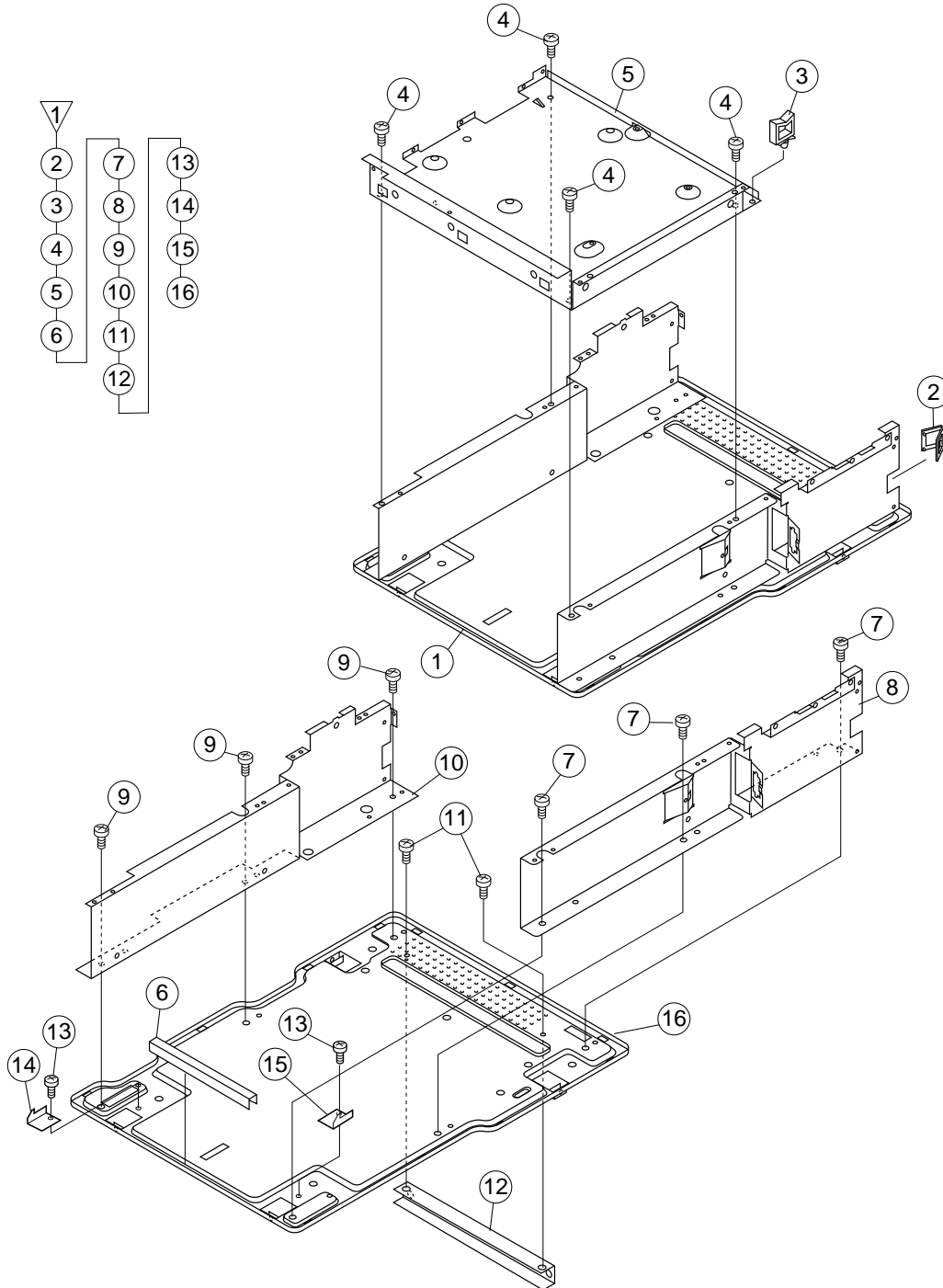


Fig. 13

14

3rd transport unit and lower chassis unit

Parts list (Fig. 14)

No.	Part name	Q'ty
1	Screw (3x6)	4
2	3rd transport unit	1
3	Lower chassis unit	1

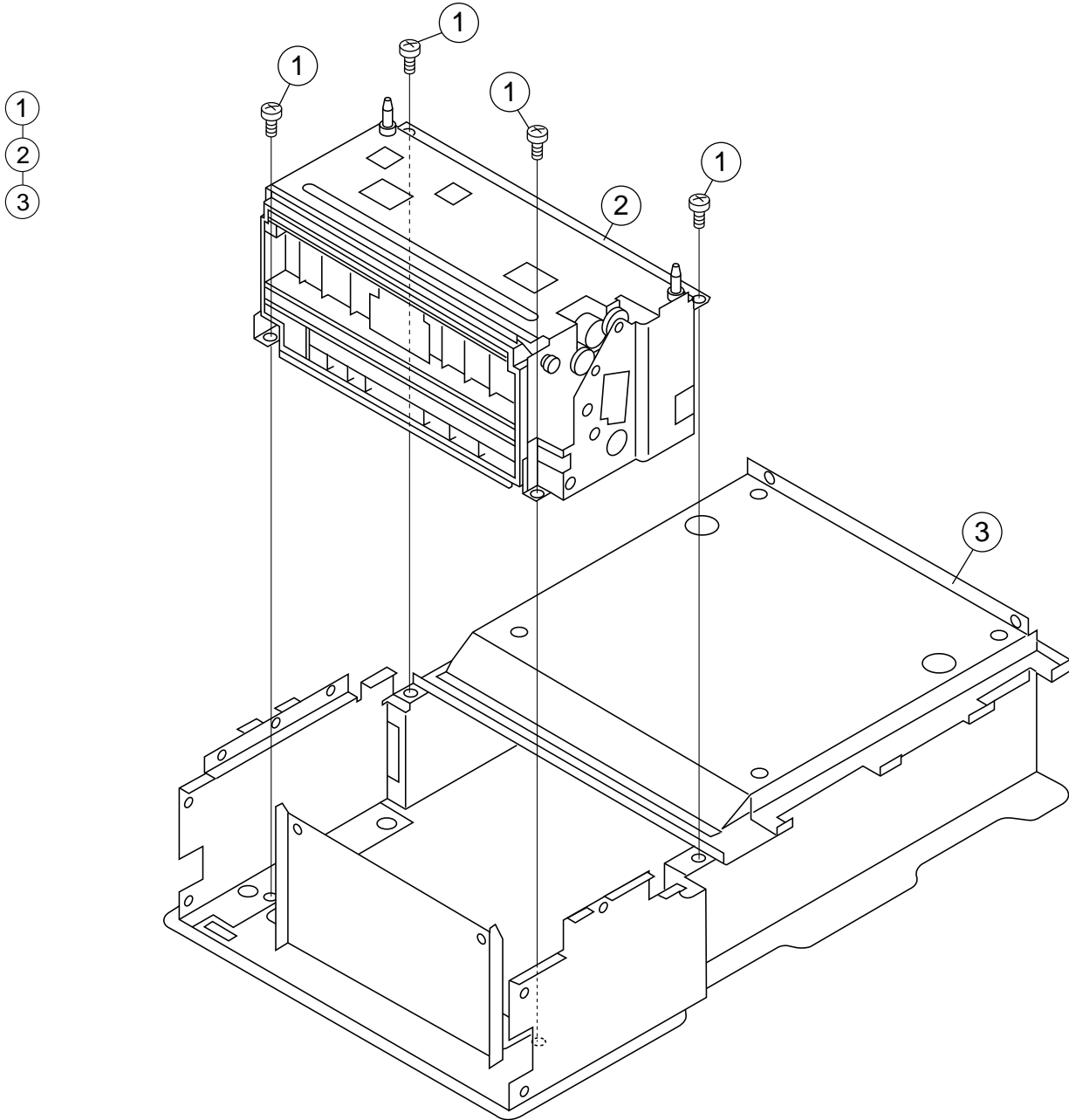


Fig. 14

15

Lower chassis unit and bottom plate

Parts list (Fig. 15)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Lower chassis unit	1	11	Bottom plate bracket, bottom	1
2	Screw (3x6)	4	12	Screw (3x6)	2
3	Top plate, bottom	1	13	Cassette lock plate, left	1
4	Foot	2	14	Cassette lock plate, right	1
5	Edging	1	15	Foot	4
6	Screw (3x6)	3	16	Bottom plate, lower	1
7	Right side chassis	1			
8	Screw (3x6)	3			
9	Left side chassis	1			
10	Screw (3x6)	2			

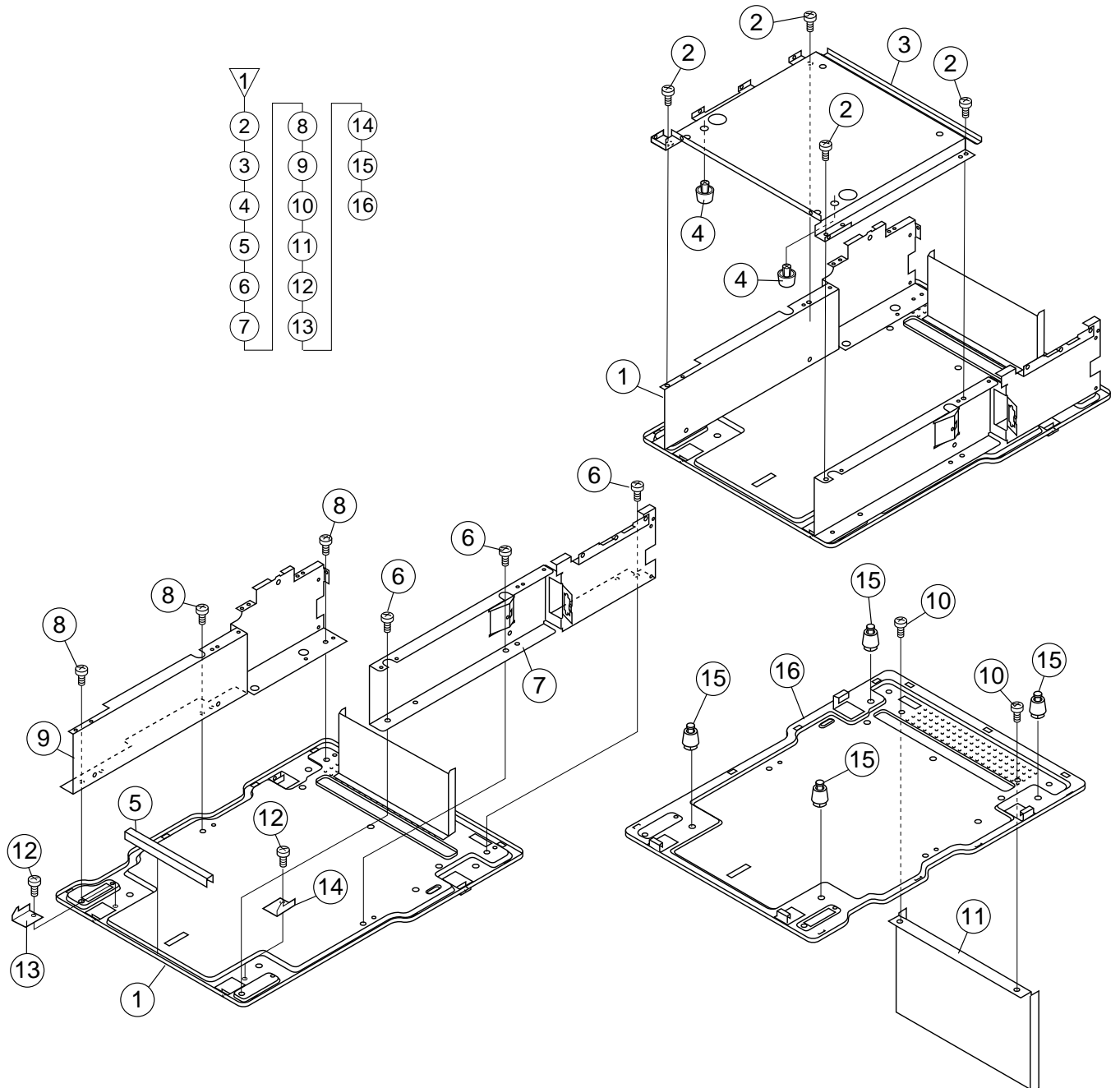


Fig. 15

16 Wire treatment

Parts list (Fig. 16)

No.	Part name	Q'ty	No.	Part name	Q'ty
1	Band (80 mm)	5	5	Core (F2064)	1
2	Core (F2094)	1	6	Core (F2063)	1
3	Screw (3x8)	2	7	Band (100 mm)	3
4	Clamp	1	8	Core (F7009)	1

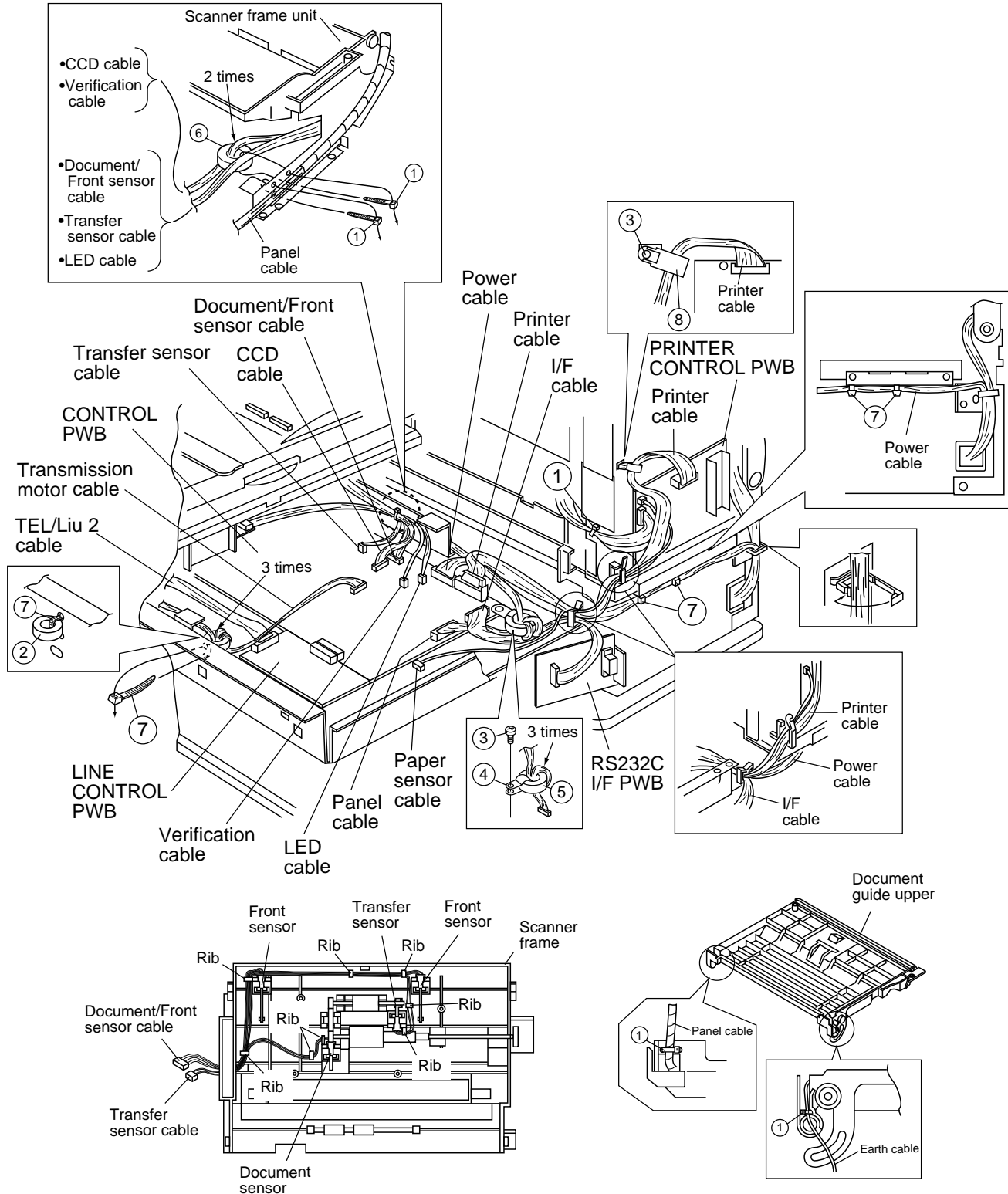


Fig. 16

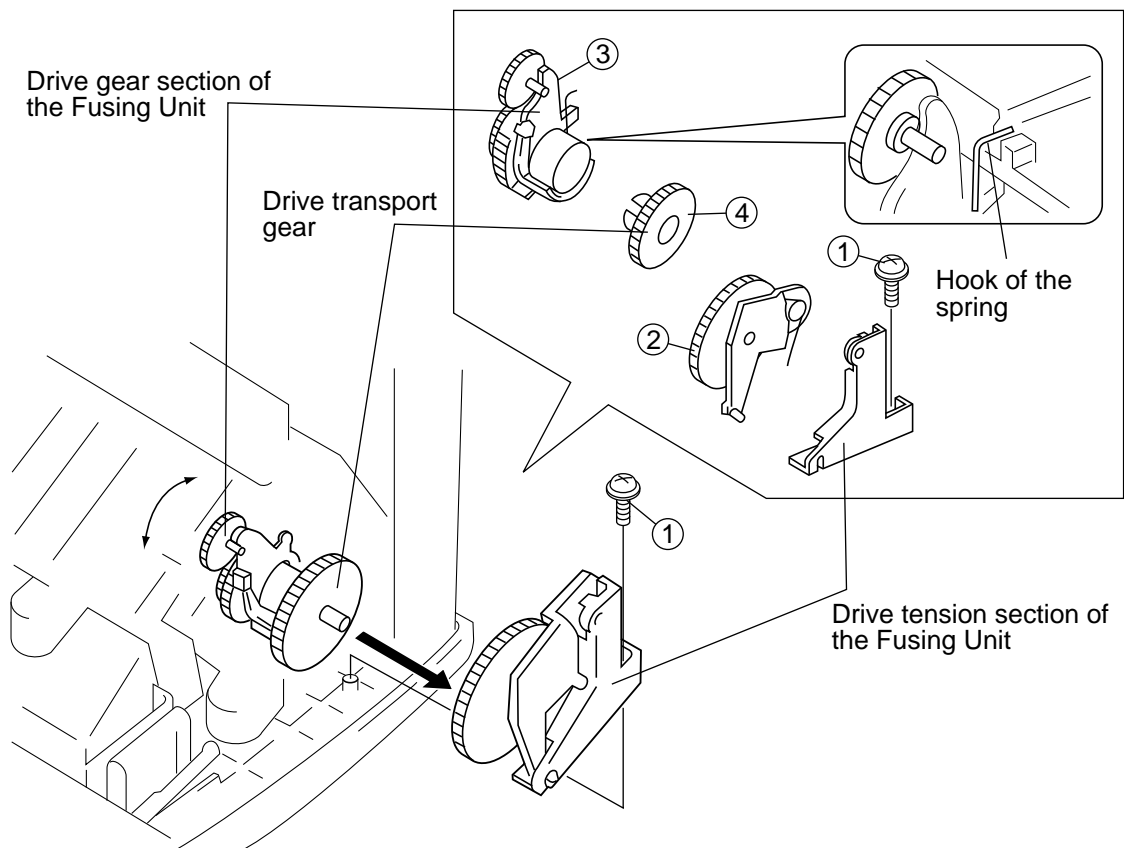
17

Fusing unit

1. Remove the Upper Unit.
2. Remove the Image Transfer Unit.
3. Remove the drive tension section of the Fusing Unit. (1 screw)
4. Remove the transport gear.
5. Release the hook of the spring and remove the drive gear section of the Fusing Unit.

NOTE:

- When rehooking the spring, be sure to hook it at the correct position.
- After reinstalling the drive section of the Fusing Unit, be sure to check if the gear section moves forward and backward as in the directions shown below.



6. Remove the fusing guide plate. (4 screws)

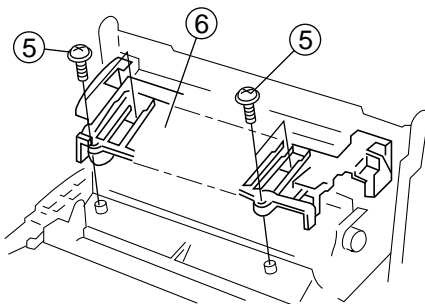
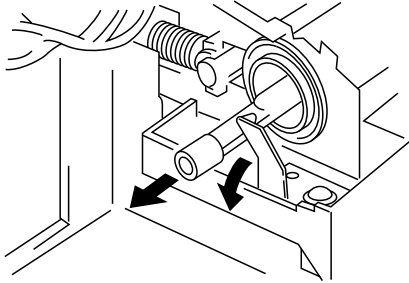


Fig. 17

18

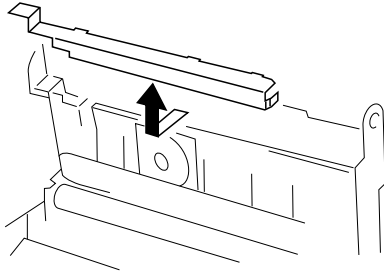
Heater lamp



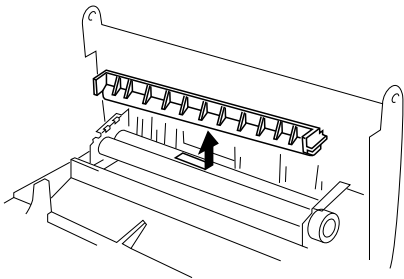
1. Pull the Heater Lamp out of the lamp holder from the right side.

NOTE:

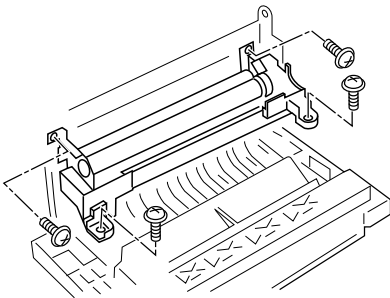
- When reinstalling the Lamp, position its voltage indication on the fusing drive gear side.
- Be sure not to touch the lamp surface with bare hands.



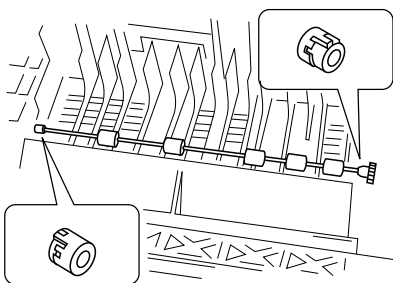
2. Remove the harness cover.



3. Remove the fusing entrance guide.



4. Remove the Fusing Unit. (4 screws)

**NOTE:**

- After reinstalling the Fusing Unit, check the direction of the bushings on the Paper Exit Roller and the connection condition between the Roller and the ground plate.

Fig. 18

19

Thermistor

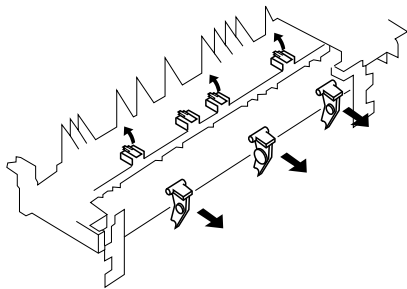
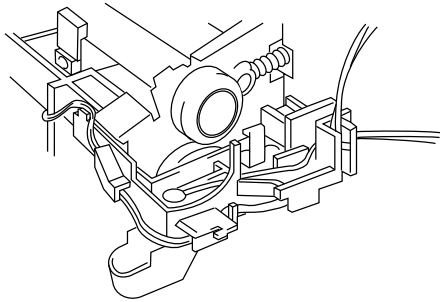
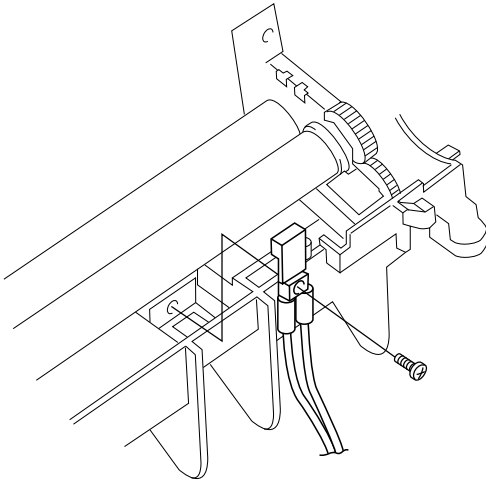


Fig. 19

1. Remove the Thermistor (TH1). (1 screw)

NOTE:

- When reinstalling the Thermistor, wire the harness as shown below.

2. Release the lock of the holder and remove the three paper separators.

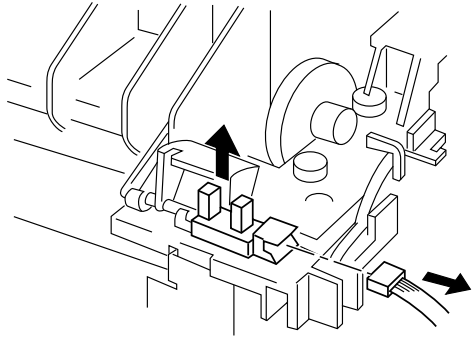
NOTE:

- When reinstalling the paper separators, be careful of these positions as the middle one differs from the others.

20

Paper exit sensor

1. Remove the Paper Exit Sensor (PC3).



2. Remove the two G-rings from the Fusing Unit.

NOTE:

When reinstalling the G-rings:

- Be careful of the direction.
- Securely position them into the grooves of the Fusing Roller.

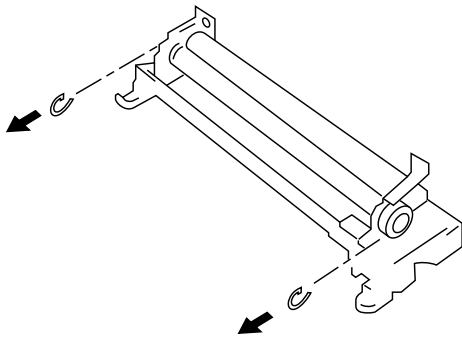


Fig. 20

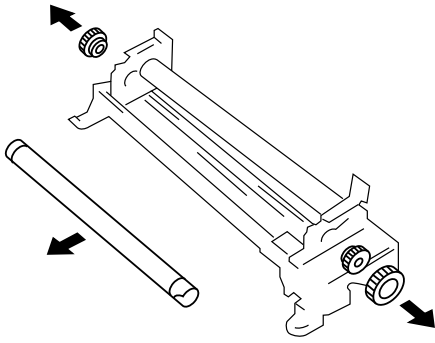
21

Fusing roller and Thermostat

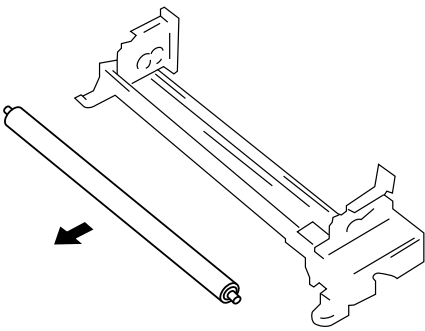
1. Remove the Upper Fusing Roller drive gear
2. Remove the Upper Fusing Roller.

NOTE:

- When reinstalling the Roller, be careful not to damage the Roller surface by the unit frame.



3. Take out the Lower Fusing Roller.



4. Remove the Thermostat (S3). (2 screws)

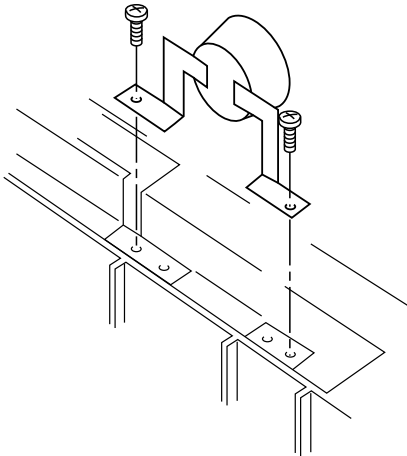
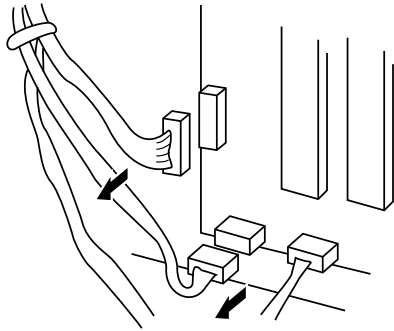


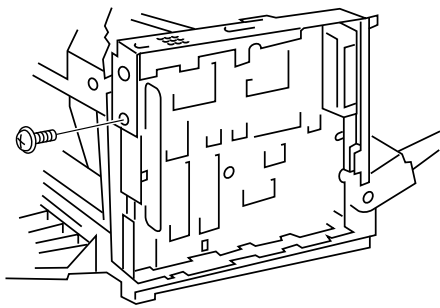
Fig. 21

22

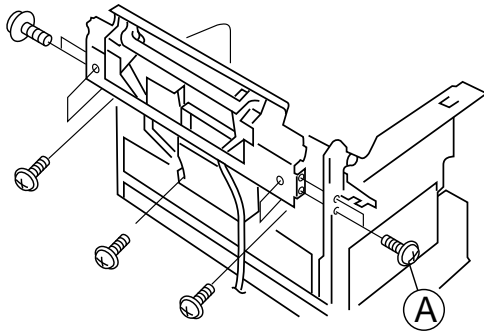
Print head unit



1. Open the Upper Unit.
2. Remove the Left, Front and Right Covers.
3. Unplug the connectors from PWB-A.
4. Cut the Tie Band.



5. Remove the screw of the cover mounting plate to ease the removal of screw (A) in the next step.



6. Remove the Print Head Unit. (7 screws)

NOTE:

- Do not disassemble the print head unit.

Fig. 22